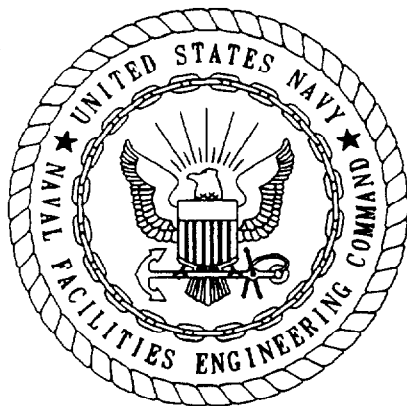


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FINAL BASE REALIGNMENT AND CLOSURE ENVIRONMENTAL SITE SCREENING
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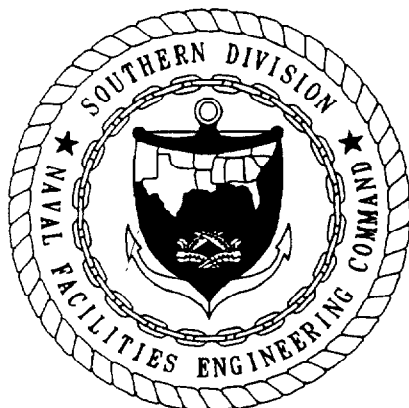
**BASE REALIGNMENT AND CLOSURE
ENVIRONMENTAL SITE SCREENING REPORT**

STUDY AREA 30

**NAVAL TRAINING CENTER
ORLANDO, FLORIDA**

**UNIT IDENTIFICATION CODE: N65928
CONTRACT NO.: N62467-89-D-0317/107**

JUNE 1998



**SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORTH CHARLESTON, SOUTH CAROLINA
29418**

**BASE REALIGNMENT AND CLOSURE
ENVIRONMENTAL SITE SCREENING REPORT**

STUDY AREA 30

**NAVAL TRAINING CENTER
ORLANDO, FLORIDA**

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Prepared by:

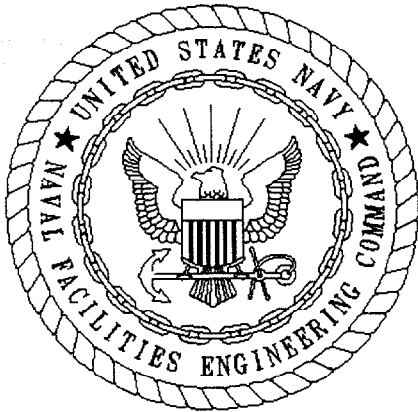
**Harding Lawson Associates
2590 Executive Center Circle, East
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Prepared for:

**Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive
North Charleston, South Carolina 29418**

Barbara Nwokike, Code 1873, Engineer-in-Charge

June 1998



CERTIFICATION OF TECHNICAL
DATA CONFORMITY (MAY 1987)

The Contractor, Harding Lawson Associates (formerly ABB Environmental Services, Inc.), hereby certifies that, to the best of its knowledge and belief, the technical data delivered herewith under Contract No. N62467-89-D-0317/107 are complete and accurate and comply with all requirements of this contract.

DATE: June 22, 1998

NAME AND TITLE OF CERTIFYING OFFICIAL: John Kaiser
Task Order Manager

NAME AND TITLE OF CERTIFYING OFFICIAL: Richard Allen
Project Technical Lead

(DFAR 252.227-7036)

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Study Area 30
Naval Training Center
Orlando, Florida

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GLOSSARY

ABB-ES	ABB Environmental Services, Inc.
bls	below land surface
CLP	Contract Laboratory Program
DQO	data quality objective
FDEP	Florida Department of Environmental Protection
HLA	Harding Lawson Associates
$\mu\text{g}/\text{kg}$	micrograms per kilogram
$\mu\text{g}/\ell$	micrograms per liter
PCB	polychlorinated biphenyl
RBC	risk-based concentration
SA	study area
SCG	soil cleanup goal
SVOC	semivolatile organic compound
TAL	target analyte list
TCL	target compound list
TPH	total petroleum hydrocarbons
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

1.0 STUDY AREA 30, AUTO HOBBY SHOP AREA

This report contains information gathered during site screening activities conducted at Study Area (SA) 30. Site screening investigations began on August 8, 1997, and were completed on February 11, 1998. Proposed field activities were presented in the Site Screening Plan (ABB Environmental Services, Inc. [ABB-ES], 1995).

1.1 SA 30, BACKGROUND AND CONDITIONS. Study Area 30 is located on the Main Base of the Naval Training Center, Orlando (Figure 1). This section provides a brief background summary of conditions at SA 30. Additional details can be found in the Site Screening Plan (ABB-ES, 1995).

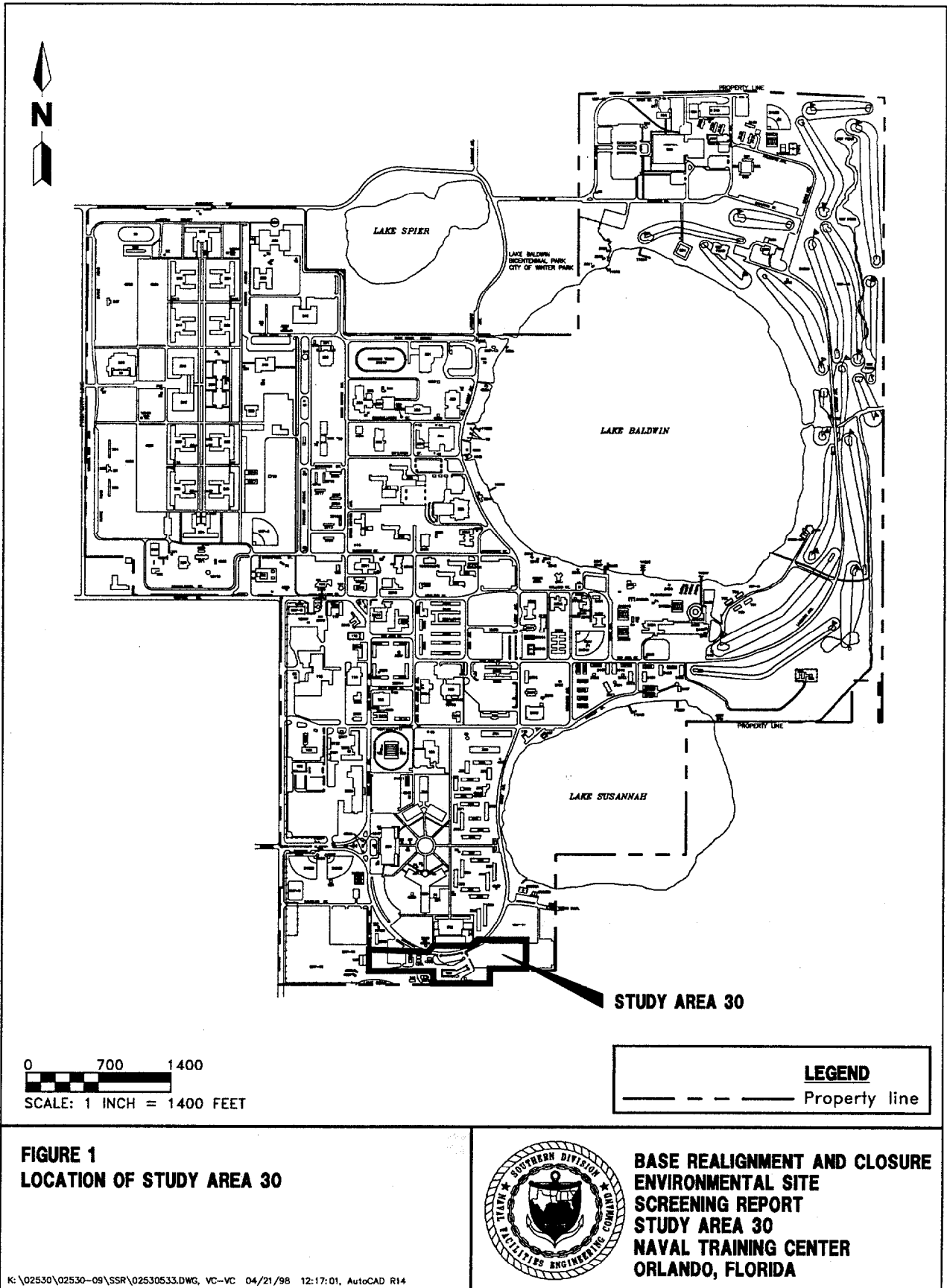
SA 30 includes the area to the south and east of Rickover Circle, on the southern part of the Main Base (Figure 2). Of the buildings currently at the site, three were included in the site screening investigation. They include Building 129, the auto hobby shop; Building 131, a paint storage building; and Building 2262, which houses the office of the contract janitorial service. These are the only facilities that were considered to have current site activities that warranted site investigation. Other buildings in the area, specifically Building 133, the car wash, and Building 139, the pesticide-mixing facility, were classified as 1/Blue in the Environmental Baseline Survey (ABB-ES, 1994). Previous site uses included motor pool vehicle maintenance operations, petroleum distribution and storage, pest control, and railroad operations. The fuel tank farm associated with Building 2273 was investigated as part of the underground storage tank (UST) program (ABB-ES, 1996).

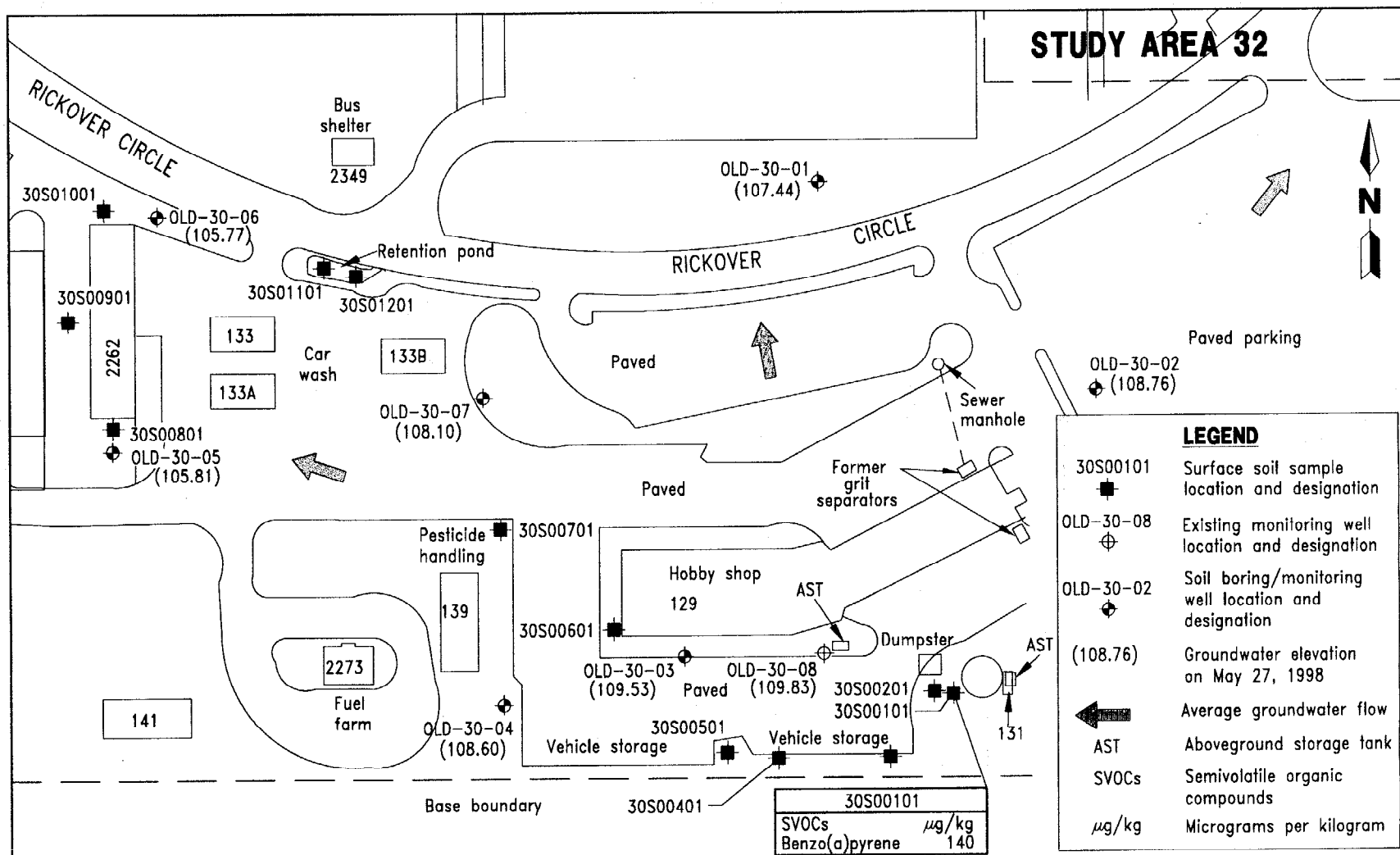
1.2 SA 30, INVESTIGATION SUMMARY. The site screening investigation was intended to evaluate media that may have received material released at the site. Historical site activities and current site conditions were used to determine sampling locations.

1.2.1 Geophysical Survey A geophysical survey was conducted to evaluate potential buried debris disposal in the western part of the SA. Evidence of possible landfilling was observed in pre-1962 aerial photographs taken of the area west of Building 2062. The area of potential debris disposal appeared to extend to the west, into the area underneath the existing parking lot.

A reference grid was established over the area of interest and a scale map of significant surface features was generated. Geophysical survey data were collected from east-west survey lines that were spaced 10 feet apart. Geophysical measurements were collected with a cesium vapor magnetometer in vertical gradient mode and an EM-61 time domain metal detector. Detected geophysical anomalies were compared with the locations of observable cultural features that might influence the instrument response. The results of the geophysical survey are included in Appendix A.

Analysis of the geophysical data does not indicate that a significant amount of buried debris is located in the area investigated.





0 50 100
SCALE: 1 INCH = 100 FEET

FIGURE 2
STUDY AREA 30 SURFACE SOIL, SOIL BORING AND MONITORING WELL LOCATIONS, BUILDINGS 129, 131 AND 2262, HOBBY SHOP, PAINT STORAGE AND JANITORIAL SERVICES, MAIN BASE



BASE REALIGNMENT AND CLOSURE ENVIRONMENTAL SITE SCREENING REPORT
STUDY AREA 30
NAVAL TRAINING CENTER
ORLANDO, FLORIDA

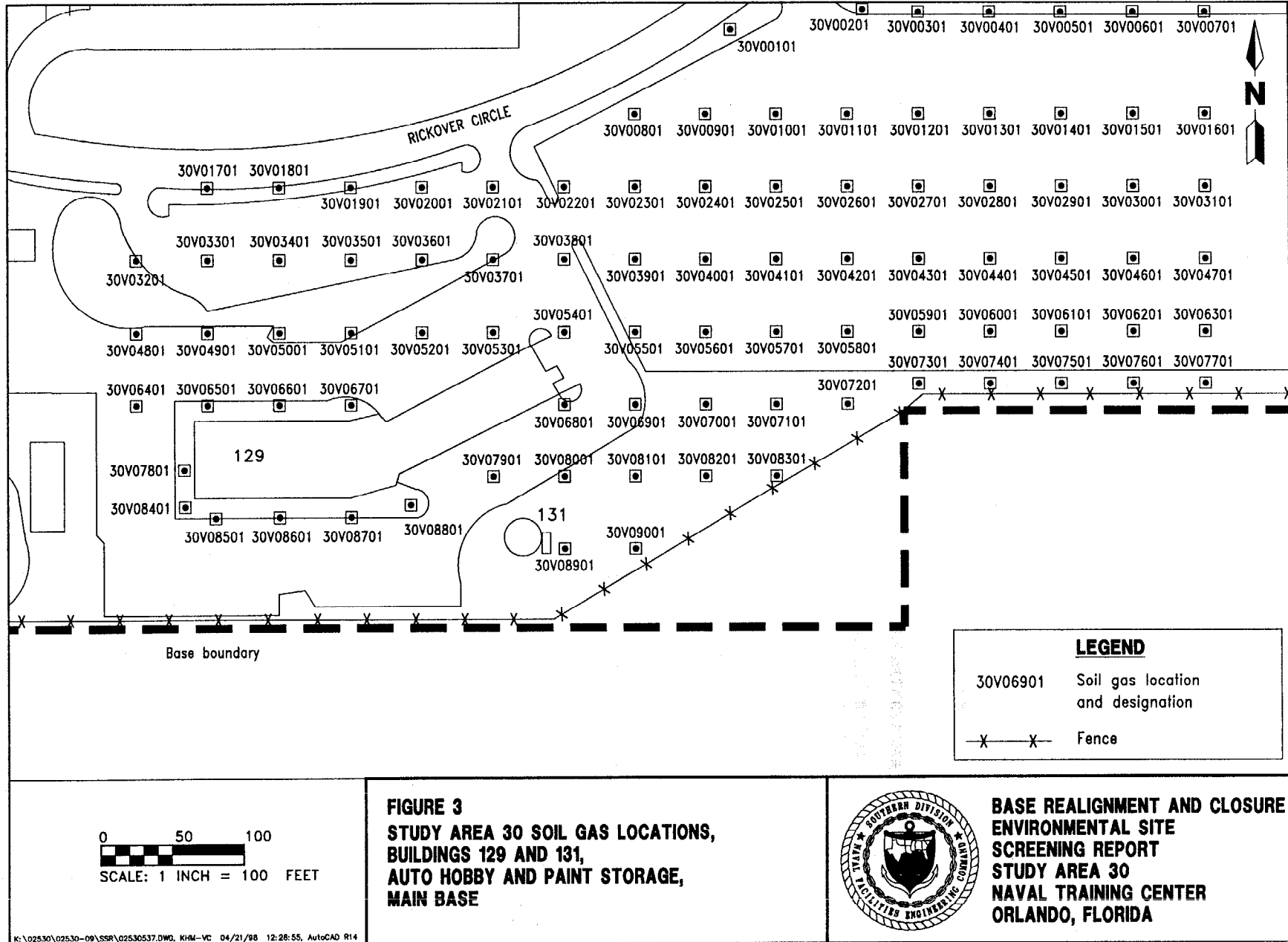
1.2.2 Passive Soil Gas Survey In order to rapidly evaluate the area that may have been affected by volatile organic compounds (VOCs) during current and past vehicle maintenance operations, a passive soil gas survey was conducted in the vicinity of Building 129. A sampling grid with nodes 50 feet apart was established over the SA (Figure 3). A passive soil gas sample collector was installed approximately 2 feet below land surface (bls) at each grid node. Nodes that would have been under buildings or in concrete were offset where necessary. When the sample collectors were retrieved, they were submitted to a laboratory for VOC analysis. No VOCs were detected in the passive soil gas samples collected during this field investigation. The laboratory analytical results are presented in Appendix B.

1.2.3 Surface Soil Sampling Surface soil samples were collected from 12 locations at SA 30 (Figure 2). Two samples (30S00101 and 30S00201) were collected from the dumpster storage area, which is located along the west side of Building 131. Two samples (30S00301 and 30S00501) were collected from the strip of grass to the south of the vehicle storage buildings, which are located south of Building 129. A single surface soil sample (30S00401) was collected between the vehicle storage buildings where a dumpster was formerly located. Surface soil sample 30S00601 was collected from the area of bare soil near the southwest corner of Building 129. A single surface soil sample (30S00701) was collected adjacent to the storm drain northeast of Building 139. Three surface soil samples (30S00801, 30S000901 and 30S01001) were collected from the south, west, and north sides of Building 2262. Two samples (30S01101 and 30S01201) were collected from the west and east ends of the retention pond that is located east of Building 2262, because no areas showed distinctive staining or stressed vegetation.

Surface soil samples for each location were submitted to an approved laboratory for full suite Contract Laboratory Program (CLP) target analyte list (TAL) and target compound list (TCL) laboratory analysis. Pesticides and polychlorinated biphenyls (PCBs), along with total petroleum hydrocarbons (TPH), were analyzed in accordance with U.S. Environmental Protection Agency (USEPA) Level IV data quality objectives (DQOs). Surface soil samples collected in the vicinity of Buildings 139 and 2262 (30S00601 through 30S01201) were also submitted for herbicide analysis.

1.2.4 Soil Boring Investigation and Subsurface Soil Sampling Seven soil borings were advanced at various locations around the SA (Figure 2). One boring (30B00101) was located north of Rickover Circle in the vicinity of the former motor pool. Another boring, 30B00201, was located to the northeast of Building 129, also in the area of the former motor pool. Two borings (30B00301 and 30B00401) were located adjacent to Building 129. Boring 30B00301 was located to the south of a flammables storage locker on the south side of Building 129, and 30B00401 was located near the southeast corner of Building 129, in the area of downgradient groundwater flow. Two borings were also located adjacent to Building 2262; boring 30B00501 was located at the southeast corner and 30B00601 was located next to the exposed pipe at the northeast corner of the building. One boring, 30B00701, was located in the central portion of the site.

1.2.5 Groundwater Monitoring Well Installation and Sampling Seven monitoring wells, OLD-30-01 through OLD-30-07, were installed during the field investigation (Figure 2). Well OLD-30-08 is a compliance well previously installed at the former waste oil UST. The other compliance wells have been abandoned.



The soil borings for the new well installations were advanced approximately 15 to 16 feet bls with hollow stem augers. The screened interval for each monitoring well bracketed the water table, which was encountered at 5 to 12 feet bls during the investigation. A groundwater sample was collected from each new well, as well as from the existing compliance well at the former location of the waste oil UST, using low-flow sampling techniques (ABB-ES, 1997).

Groundwater samples were submitted to an approved laboratory for full suite CLP TAL and TCL laboratory analysis. Pesticides and PCBs, along with TPH and suspended solids, were analyzed in accordance with USEPA Level IV DQOs. Filtered samples (0.45-micron in-line filter) were also collected and submitted for TAL inorganics analysis only. A second groundwater sampling event was conducted at two of the monitoring wells, OLD-30-02 and OLD-30-03, with groundwater and filtered groundwater samples submitted for TAL inorganic analysis.

A round of static water-level measurements were made following the groundwater sampling activities. Water-level data were collected from the SA 30 monitoring wells, three monitoring wells at SA 32, and three monitoring wells installed for the UST investigation at Building 2273. The groundwater elevations were used to interpret groundwater flow directions at the site (Figure 2).

The monitoring well installation diagrams and field sample data are included in Appendix C.

1.3 SA 30, RESULTS. The analytical results of the surface and subsurface soil samples collected during site screening at SA 30 were evaluated by comparing the concentration of the various compounds detected to screening criteria, including basewide soil background screening levels, Florida Department of Environmental Protection's (FDEP's) soil cleanup goals (SCGs), and USEPA Region III risk-based concentrations (RBCs).

Analytical results are presented as Positive Detections Tables in Appendix D. A summary of all analytical results is presented in Appendix E. Exceedances of background screening or regulatory guidance concentrations (shaded on the positive detections tables) are displayed in chemical boxes near their respective explorations on Figure 2.

1.3.1 Surface Soil Analytical Results Analysis of the surface soil collected at SA 30 detected VOCs, semivolatile organic compounds (SVOCs), pesticides, PCBs, herbicides and inorganics (Appendix D, Table D-1). A single SVOC, benzo(a)pyrene, was detected at concentrations exceeding screening criteria. The detected concentration of benzo(a)pyrene in sample 30S00101 was 140 micrograms per kilogram ($\mu\text{g}/\text{kg}$), exceeding both the Florida residential SCG (100 $\mu\text{g}/\text{kg}$) and the USEPA Region III residential RBC for soil (88 $\mu\text{g}/\text{kg}$). Sample 30S00101 is located behind a dumpster in an area that would receive surface water runoff from Building 131 as well as the surrounding asphalt-paved surfaces. Since benzo(a)pyrene was not detected in groundwater, comparison to leachability-based SCGs is not required.

1.3.2 Subsurface Soil Analytical Results Analysis of the subsurface soil collected at SA 30 detected SVOCs, pesticides, herbicides, and inorganics (Appendix D, Table D-2). None of the analytes detected in the subsurface samples from SA 30 were at concentrations exceeding screening values. Since none of the

analytes detected in the subsurface soil were found in groundwater above screening values, comparison to leachability-based SCGs is not necessary.

1.3.3 Groundwater Analytical Results Analysis of the groundwater collected at SA 30 detected VOCs, SVOCs, pesticides, and inorganics (Appendix D, Table D-3).

Aluminum was detected in the groundwater sample from OLD-30-01 (30G00101) at a concentration of 4,130 micrograms per liter ($\mu\text{g}/\ell$), which slightly exceeded the background screening value of 4,067 $\mu\text{g}/\ell$. This concentration is well below the RBC for aluminum in groundwater of 37,000 $\mu\text{g}/\ell$. The Florida groundwater guidance value for aluminum (200 $\mu\text{g}/\ell$) is a secondary standard. Secondary standards have been established for Class G-I and G-II aquifers by the State of Florida, largely along Federal guidelines, to ensure that groundwater meets at least minimum criteria for taste, odor, and color. Secondary standards were not established for human health, cancer risk, or ecological risk considerations; however, these standards are enforceable in the State of Florida.

A description of past site activities was included in Section 1.1. Based on records reviews and interviews, there have been no known site activities that may have contributed to the observed exceedance of the secondary standards for aluminum. Surface and subsurface soil concentrations of aluminum did not exceed background screening concentrations. The sample was very turbid (178.9 nephelometric turbidity units) and had 150 milligrams per liter of suspended solids, suggesting that suspended solids contributed to the observed secondary standard exceedance for aluminum. There were no other TAL metal exceedances, and groundwater parameters measured during sampling (pH, temperature, conductivity, and turbidity) were within normal limits. Harding Lawson Associates (HLA) (formerly ABB-ES) concludes that the aluminum concentrations are naturally occurring, are not related to past site activities, and do not pose a risk to human health or the environment. The aluminum concentration in the filtered sample from OLD-30-01 (30H00101) was 516 $\mu\text{g}/\ell$. The other analytes detected in the groundwater samples were below screening values.

Analysis of groundwater sample 30H00201 (the filtered aliquot of 30G00201) collected from well OLD-30-02 on November 12, 1997, detected chromium, iron, manganese, mercury, and nickel at concentrations above screening values. None of these elements were detected in the nonfiltered sample (30G00201). The monitoring well was resampled on February 11, 1998, and samples 30G00202 and 30H00202 were submitted for TAL metal analysis. Each of the inorganics previously detected above screening values were at concentrations below screening values or below detection limits in the second sampling episode.

Analysis of groundwater sample 30G00301 collected from OLD-30-03 detected chromium and nickel at concentrations above screening values. These elements were also detected in the filtered sample (30H00201), but at concentrations below screening values. The monitoring well was resampled (30G00302 and 30H00302) for TAL metal analysis. Each of the inorganics previously detected above screening values were at concentrations below screening values or below detection limits in the second sampling episode.

The only organic analyte that exceeded screening criteria in groundwater samples from SA 30 was methylene chloride. Methylene chloride was detected in the field duplicate sample (30G00301D) collected at OLD-30-03 at a concentration of 8 $\mu\text{g}/\ell$, which exceeds the FDEP groundwater guidance concentration and maximum contaminant

level of 5 $\mu\text{g}/\ell$. Methylene chloride was below detection limits in the corresponding sample (30G00301). The methylene chloride concentration, 20 $\mu\text{g}/\ell$, in the groundwater sample from OLD-30-07 (30G00701) was also higher than the screening values.

The detection of methylene chloride in samples from SA 30 is not unusual. Methylene chloride is commonly encountered as a laboratory artifact in environmental samples because it is the principal solvent used in the majority of USEPA analytical methods. While the analytical results for groundwater and associated quality assurance and quality control samples for SA 30 do not indicate that the laboratory has introduced methylene chloride contamination, other sample delivery groups submitted recently to the same analytical laboratory had low-level detections of methylene chloride in both rinsate and trip blanks.

Another factor supporting the interpretation of the methylene chloride detections as a laboratory artifact is that it is the only VOC detected in groundwater sampled at SA 30. Methylene chloride is inherently unstable and would likely degrade in time into other compounds, such as chloroform or chloromethane. Moreover, industrial-grade methylene chloride normally contains plasticizers and stabilizers (e.g., cyclohexane) and is sometimes mixed with other chlorinated solvents, which would have been detected by the analytical methods used if present in the groundwater samples.

1.4 SA 30, CONCLUSIONS AND RECOMMENDATIONS. The analytical results from media sampled at SA 30 do not indicate that the site has been affected by past site use. Benzo(a)pyrene was detected in surface soil sample 30S00101 at a concentration of 140 micrograms per kilogram ($\mu\text{g}/\text{kg}$), exceeding both the Florida residential SCG (100 $\mu\text{g}/\text{kg}$) and the USEPA Region III residential RBC for soil (88 $\mu\text{g}/\text{kg}$). However, the sample is located behind a dumpster in an area that would receive surface water runoff from an adjacent building as well as surrounding asphalt-paved surfaces.

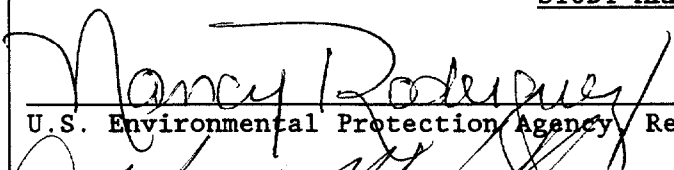
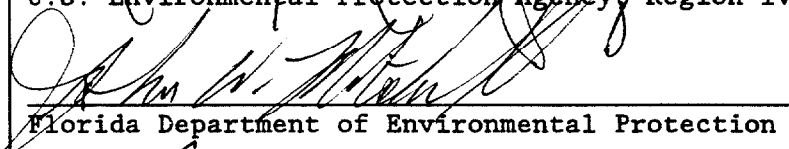
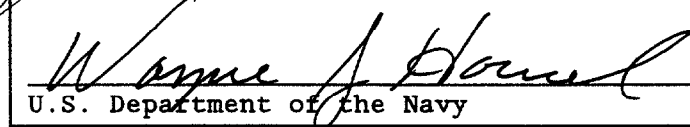
Aluminum was detected in one groundwater sample, 30G00101, at a concentration of 4,130 $\mu\text{g}/\ell$, which is slightly above the background screening concentration of 4,067 $\mu\text{g}/\ell$. The turbidity and total suspended solids of the groundwater at the time of sampling were elevated, indicating that suspended sediment is likely responsible for aluminum concentrations in the sample. In addition, the filtered sample, 30H00101, had a much lower concentration (516 $\mu\text{g}/\ell$ versus 4,660 $\mu\text{g}/\ell$), further evidence that the aluminum exceedance was due to sample turbidity. Surface and subsurface soil did not have any detections of aluminum above screening criteria.

The detection of several inorganic analytes at concentrations above screening values in the groundwater samples from OLD-30-02 and OLD-30-03 prompted a resampling of those two wells. The previous inorganic exceedances were not confirmed by the resampling event. Several of the inorganics originally above screening values were not detected at all when resampled. The remainder of the previous exceedances were below screening values. Since the concentrations detected in the samples collected during the resampling differed significantly from the first samples collected, these results are most readily explained by either a laboratory error or possible contamination of the sampling containers.

Methylene chloride was detected in one groundwater sample (30G00701) and the field duplicate (30G00301D) of sample 30G00301 at concentrations above screening values. Since methylene chloride was detected in the field duplicate but not the corresponding sample from OLD-30-03, the most likely explanation would be laboratory contamination. Methylene chloride is a common laboratory artifact. The detection in sample 30G00701 is also attributable to laboratory contamination because none of the degradation products of or compounds commonly mixed with methylene chloride were detected at the site.

HLA (formerly ABB-ES) recommends that SA 30 be made eligible for transfer. Because the site had a single benzo(a)pyrene detection in surface soil at a concentration slightly exceeding the Florida residential SCG and the USEPA Region III residential RBC, HLA recommends that the site be reclassified from 7/Gray to 3/Light Green.

The undersigned members of the Orlando Partnering Team concur with the findings and recommendations of the preceding investigation.

<u>STUDY AREA 30</u>	
 _____ U.S. Environmental Protection Agency Region IV	<u>6/23/98</u> _____ Date
 _____ Florida Department of Environmental Protection	<u>7/1/98</u> _____ Date
 _____ U.S. Department of the Navy	<u>6/23/98</u> _____ Date

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APPENDIX A
TECHNICAL MEMORANDUM
GEOPHYSICAL SURVEY RESULTS
STUDY AREA 30, AUTO HOBBY SHOP

TECHNICAL MEMORANDUM
GEOPHYSICAL SURVEY RESULTS
STUDY AREA 30, AUTO HOBBY SHOP

INTRODUCTION. The following is a summary of the significant findings of the geophysical survey that took place in August 1997 at Study Area (SA) 30, at the Main Base of Naval Training Center, Orlando. The purpose for the survey was to evaluate potential buried debris disposal in the western part of the study area. Evidence of possible landfilling was observed in pre-1962 aerial photographs taken of the area west of Building 2062. The area of potential debris disposal appeared to extend to the west, into the area underneath the existing parking lot.

Following is a discussion of the results.

FIELD PROGRAM. Geophysical surveys included magnetometer and time domain metal detector (TDMD) surveys in the parking lot west of Building 2062 (Figure 1).

Grid Coordinate System. Prior to the start of the field program, ABB-ES established a grid coordinate system in the area of interest. The grid coordinate system was oriented along magnetic north and consisted of a 100- by 100-foot grid established with a compass and cloth measuring tape.

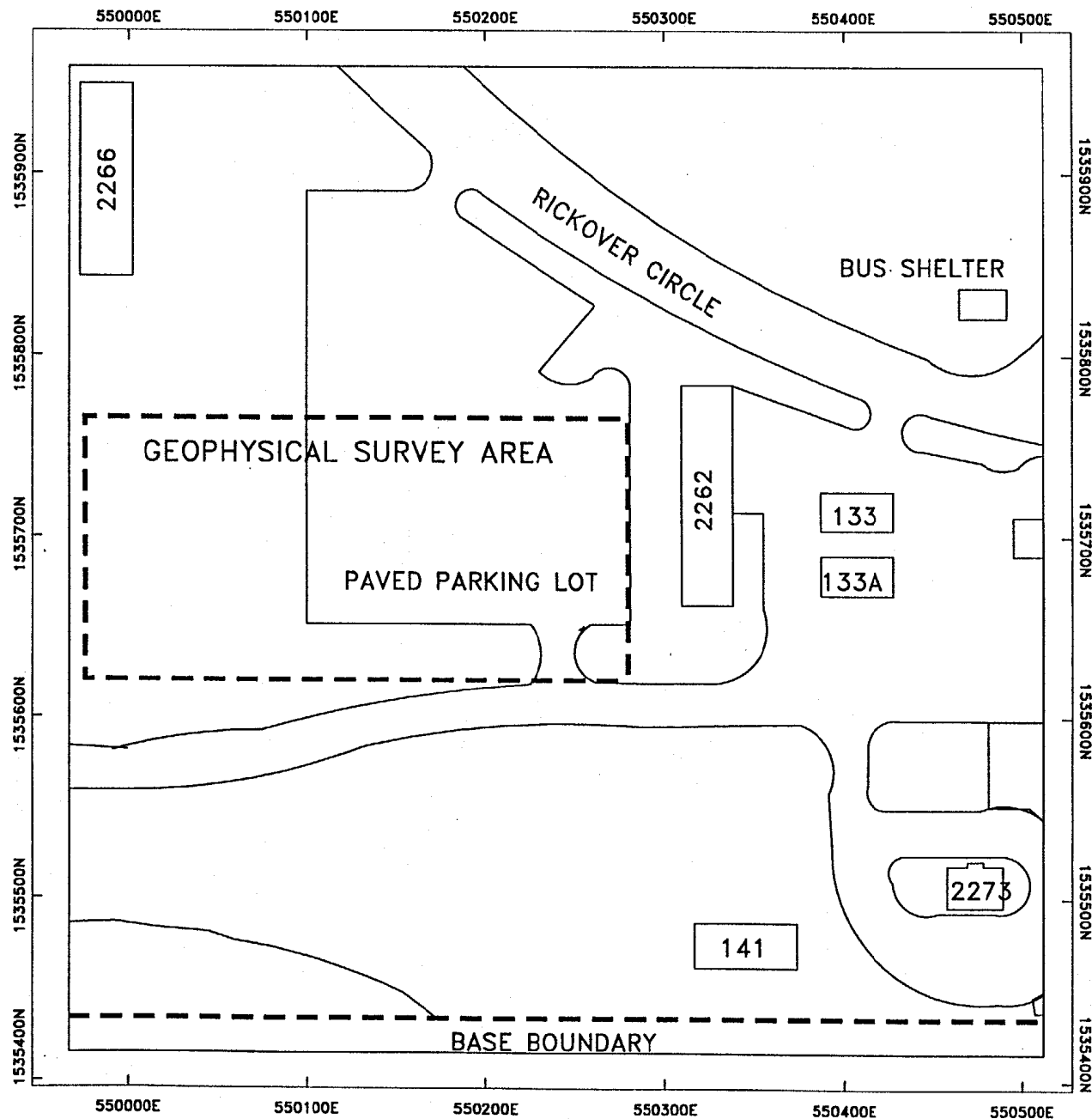
Magnetometer Survey. The magnetometer instrumentation consisted of a cesium vapor magnetometer that was configured in the vertical gradient mode. Thus, the instrument required two magnetic sensors mounted on a vertical (nonmagnetic) rod. The sensors were separated by a distance of one meter. The instrument collected total field magnetic readings in both the lower and upper sensors once per second during the survey. Individual traverses were established in an east-west direction, and successive traverse lines were separated by 10 feet.

The magnetic method is a versatile geophysical technique used for evaluating shallow geologic structures and for locating buried manmade objects and buried debris by mapping local distortions in the earth's magnetic field produced by buried magnetic objects (steel and other magnetic materials). Vertical gradient measurements are very useful in mapping the lateral extent of landfilled materials, since nearly all landfills contain sufficient ferrous materials to be mapped with this technique. Vertical gradient measurements of the earth's magnetic field are often taken during environmental magnetic surveys because they are more sensitive to the presence of near-surface metal objects than total field values alone.

More than 1,500 individual magnetic stations were established during the survey.

Time Domain Metal Detector Survey. The TDMD survey was operated along the same grid as the magnetometer survey, and with the same spacing (10 feet) between traverses. Data were acquired along each traverse at the rate of 1.60 readings per foot (1 reading every 19 centimeters). The instrumentation consisted of a Geonics EM-61 TDMD with a Polycorder high capacity data logger.

The EM-61 TDMD was designed to map buried conductive objects, such as metal tanks, drums, and utilities. The instrument incorporates an antenna system consisting of a transmitter and receiver. The transmitter produces a series of



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(feet)

SOUTHERN DIVISION
GEOPHYSICAL SURVEY
STUDY AREA 30
ABB ENVIRONMENTAL SERVICES, INC.

FIGURE 1

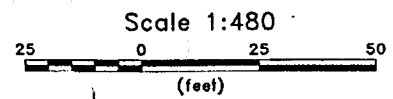
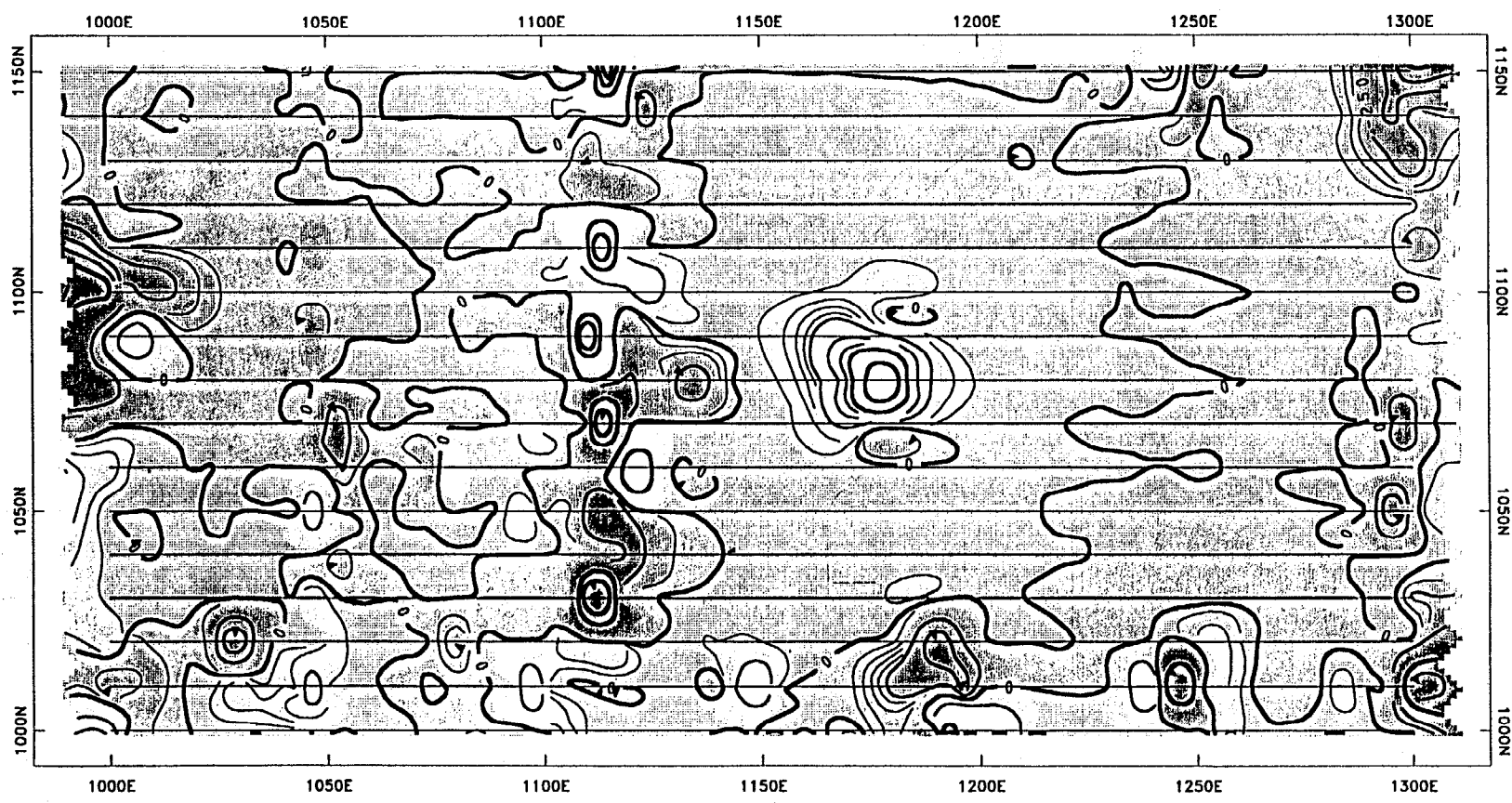
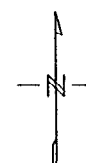
electromagnetic (EM) wavelets that pulse into the earth 75 times per second. After each pulse, a secondary EM field is produced briefly from moderately conductive shallow soils, and for a longer period of time from buried metallic objects. Between primary EM pulses, a time delay is imposed upon the data logger to permit the secondary response from the soils to dissipate prior to the somewhat later and longer response from any buried metal that is present. The receiver senses the secondary responses from metallic objects and they are recorded by the data logger.

There is an upper and a lower coil (Channel 1 and Channel 2, respectively, on the data output) on the EM-61 TDMD. One option for data presentation is to contour the output (in millivolts) of the lower coil, which is more sensitive to shallow buried objects, in combination with a second contour map of the vertical gradient between the upper and lower coils (a dimensionless parameter). The gradient values minimize the effects of near surface metallic materials. Thus, the former data set maps shallow metallic objects, whereas the latter delineates relatively deeper objects.

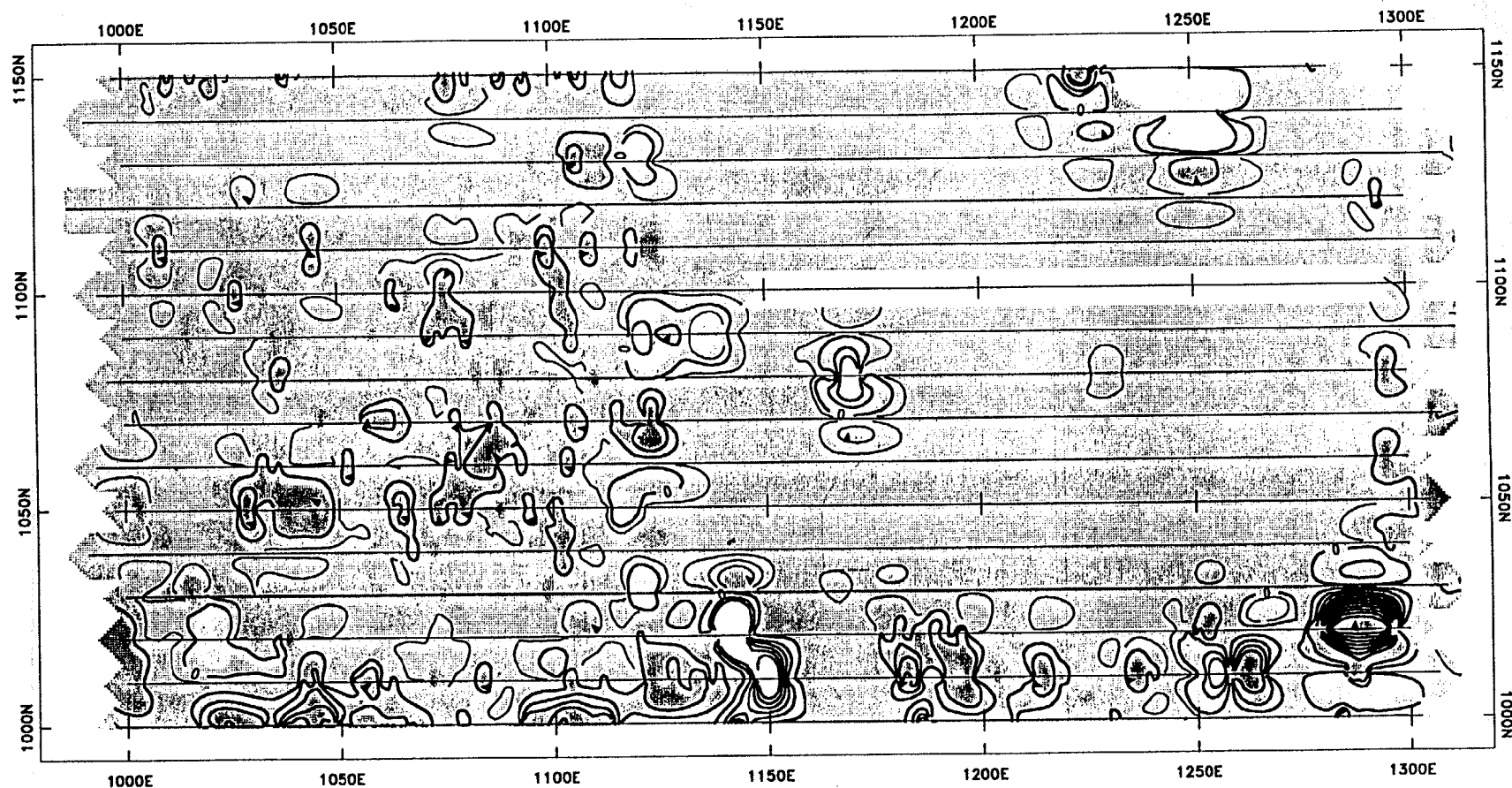
RESULTS. Figure 1 shows the approximate location of the magnetometer and TDMD surveys completed at SA 30. Figure 2 presents the vertical gradient (magnetic) contours for the geophysical data. Figures 3 and 4 present contour maps derived from the lower sensor (sensitive to shallow buried objects) and from the vertical gradient between the upper and lower sensors (more sensitive to more deeply buried objects).

During the field survey, a site sketch map was generated that noted cultural features likely to produce "noise" on magnetic and electromagnetic data. When these features are superimposed over the magnetic and EM contour maps, they correspond with geophysical anomalies. For example, on Figure 2 (Vertical Magnetic Gradient Contours), there is a linear north-south anomaly located approximately 110 feet east of the western edge of the survey area, which is at 1000 feet east (an arbitrary setting). The geophysical anomaly is caused by a concrete (and steel reinforcing rod) curbing. Another anomaly in the central portion of the survey area about 60 feet east of the linear anomaly is a light pole and concrete curbing.

A widespread disposal area with buried metallic debris would have a much different magnetic and electromagnetic signature than that observed in these data. Accordingly, ABB Environmental Services, Inc., concludes that the area is not underlain by old landfilled debris.



SOUTHERN DIVISION
VERTICAL MAGNETIC GRADIENT CONTOURS
STUDY AREA 30
ABB ENVIRONMENTAL SERVICES, INC.
FIGURE 2



Scale 1:480

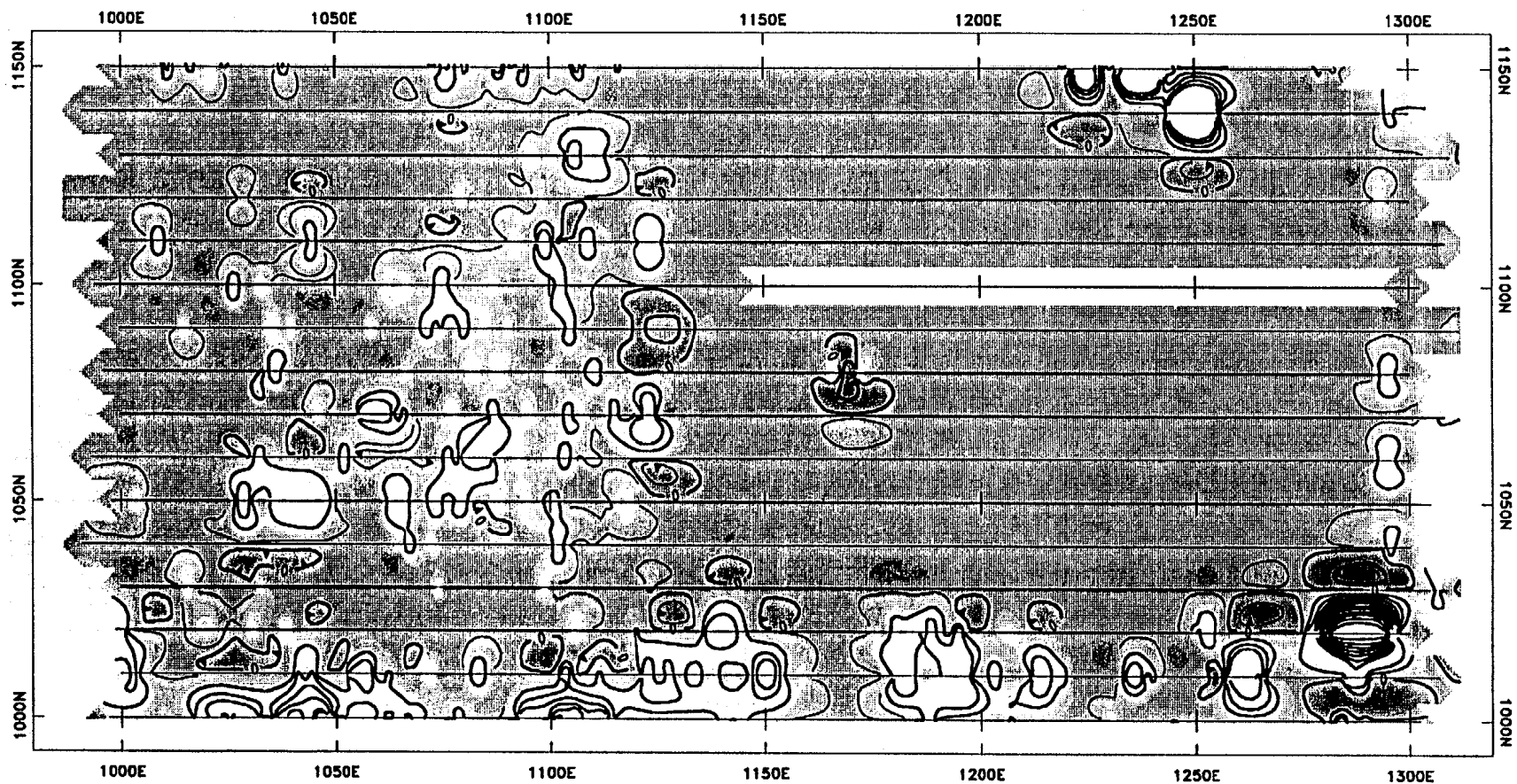
25 0 25 50
(feet)

SOUTHERN DIVISION

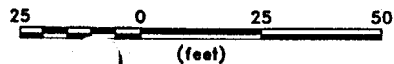
TIME DOMAIN METAL DETECTOR CONTOURS
(CHANNEL 2, LOWER SENSOR)
STUDY AREA 30

ABB ENVIRONMENTAL SERVICES, INC.

FIGURE 3



Scale 1:480



SOUTHERN DIVISION
TIME DOMAIN METAL DETECTOR CONTOURS
(CHANNEL 4, VERTICAL GRADIENT)
STUDY AREA 30

ABB ENVIRONMENTAL SERVICES, INC.

FIGURE 4

APPENDIX B

SOIL GAS SURVEY ANALYTICAL RESULTS

Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	35V- 01401 (ug/L)	35V- 02601 (ug/L)	35V- 02601D (ug/L)	35V- 01501 (ug/L)	35V- 01601 (ug/L)	35V- 01701 (ug/L)	35V- 01701D (ug/L)	36V- 02701 (ug/L)	30V- 08901 (ug/L)	30V- 09001 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

1 S S S S S S S S

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst:

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Phone: (410)992-6622

9180 Rumsey Rd. Columbia, MD 21045

Fax: (410)992-0347

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Target Environmental Services, Inc.

Mobile Laboratory Services

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 Purchase Order:

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 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
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 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	30V- 08101 (ug/L)	30V- 08001 (ug/L)	30V- 07901 (ug/L)	30V- 08201 (ug/L)	30V- 08801 (ug/L)	30V- 08701 (ug/L)	30V- 08601 (ug/L)	30V- 08501 (ug/L)	30V- 08401 (ug/L)	30V- 07801 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

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Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst:

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Phone: (410)992-6622

9180 Rumsey Rd. Columbia, MD 21045

Fax: (410)992-0347

Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
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USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	30V- 07801D (ug/L)	30V- 06401 (ug/L)	30V- 06501 (ug/L)	30V- 06601 (ug/L)	30V- 06701 (ug/L)	30V- 04801 (ug/L)	30V- 04901 (ug/L)	30V- 05101 (ug/L)	30V- 05201 (ug/L)	30V- 05201D (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

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SAMPLE NARRATIVE:

Quality Control Analyst: _____

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Mobile Laboratory Services

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 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	30V- 05301 (ug/L)	30V- 05401 (ug/L)	30V- 06801 (ug/L)	30V- 05501 (ug/L)	30V- 05601 (ug/L)	30V- 05701 (ug/L)	30V- 05801 (ug/L)	30V- 04201 (ug/L)	30V- 04201D (ug/L)	30V- 04101 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst: _____

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Phone: (410)992-6622

9180 Rumsey Rd. Columbia, MD 21045

Fax: (410)992-0347

Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	LABDUP LABDUP									
				30V- 04001 (ug/L)	30V- 03901 (ug/L)	30V- 03801 (ug/L)	30V- 03701 (ug/L)	30V- 03601 (ug/L)	30V- 03501 (ug/L)	30V- 03401 (ug/L)	30V- 08601 (ug/L)	30V- 05801 (ug/L)	30V- 03301 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst: _____

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Fax: (410)992-0347

Fixed Laboratory Services

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Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	30V- 03201 (ug/L)	30V- 01701 (ug/L)	30V- 01801 (ug/L)	30V- 01801D (ug/L)	30V- 01901 (ug/L)	30V- 02001 (ug/L)	30V- 02101 (ug/L)	30V- 02301 (ug/L)	30V- 02401 (ug/L)	30V- 02501 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst:

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Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	LABDUP									
				30V- 02601 (ug/L)	30V- 01101 (ug/L)	30V- 01001 (ug/L)	30V- 00901 (ug/L)	30V- 00801 (ug/L)	30V- 02401 (ug/L)	30V- 00801D (ug/L)	30V- 07201 (ug/L)	30V- 07101 (ug/L)	36V- 04501 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst:

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Phone: (410)992-6622

9180 Rumsey Rd. Columbia, MD 21045

Fax: (410)992-0347

Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	LABDUP LABDUP		36V- 00601 (ug/L)	30V- 00301 (ug/L)	30V- 00401 (ug/L)	30V- 00501 (ug/L)	30V- 00501D (ug/L)	30V- 00601 (ug/L)	30V- 00701 (ug/L)	30V- 01601 (ug/L)
				36V- 04701 (ug/L)	36V- 00501 (ug/L)								
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	98.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst: _____

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Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	30V- 01501 (ug/L)	30V- 01401 (ug/L)	30V- 01301 (ug/L)	30V- 01201 (ug/L)	30V- 02701 (ug/L)	30V- 02801 (ug/L)	30V- 02901 (ug/L)	30V- 03101 (ug/L)	30V- 03101D (ug/L)	30V- 07501 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst:

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Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
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 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	LABDUP LABDUP				
				30V- 04501 (ug/L)	30V- 04401 (ug/L)	30V- 04301 (ug/L)	30V- 07401 (ug/L)	30V- 04301 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND
1,1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

1 S S S S S

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst:

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Fixed Laboratory Services

Target Environmental Services, Inc.

Mobile Laboratory Services

Samples Collected: 8/21/97 - 8/28/97
 Samples Received: 8/25/97 - 9/3/97
 Samples Analyzed: 8/26/97 - 9/8/97
 Samples Reported: 9/8/97
 Project Identification: NTC, ORLANDO
 Target Job Code: ABT002
 Purchase Order:

Collected by: ABB-ES
 Received by: Guy Auld
 Analyzed by: Guy Auld
 Reported by: Guy Auld
 Report Revision: 0.0
 Method Deviations: none
 Sampling Method: Passive soil gas

Client: ABB-ES
 Client Address: 1080 Woodcock Road, Suite 100
 Orlando, FL 32803
 Client Contact: John Kaiser
 Client Phone: 407-895-8845
 Client Fax: 407-896-6150

USEPA Method 8260 Passive Soil Gas Sample Analysis Results (in ug/L)

Compound	MW ¹ (g/mole)	MDL ² (ug/L)	PQL ³ (ug/L)	30V- 07501D (ug/L)	30V- 07401 (ug/L)	30V- 07301 (ug/L)	30V- 07701 (ug/L)	30V- 06301 (ug/L)	30V- 06101 (ug/L)	30V- 06001 (ug/L)	30V- 05901 (ug/L)	30V- 04701 (ug/L)	30V- 04601 (ug/L)
Dichlorodifluoromethane	120.91	0.688	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	50.49	0.559	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	62.50	1.011	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	94.94	0.444	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	64.51	0.341	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	138.38	0.334	10.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	96.94	0.298	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	84.93	0.448	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	96.94	0.419	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	98.96	0.488	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	96.94	0.455	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	119.38	0.472	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	133.40	0.465	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	153.82	0.421	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	78.11	0.496	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	98.96	0.639	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	131.39	0.135	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	112.99	0.121	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	163.83	0.161	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	173.83	0.525	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	110.97	0.306	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	92.14	0.156	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	110.97	0.412	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	133.40	0.551	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene or PCE	165.83	0.231	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	208.28	0.264	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	187.86	0.562	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	112.56	0.171	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	167.85	0.117	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	106.17	0.308	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	106.17	0.473	5.00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	106.17	0.227	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	104.15	0.181	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	120.19	0.339	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	252.73	0.338	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	167.85	0.649	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	147.43	0.451	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	157.01	0.127	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	134.22	0.296	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	134.22	0.301	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	147.00	0.084	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	147.00	0.047	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	147.00	0.164	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	134.22	0.276	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	181.45	0.406	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	260.76	0.461	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	128.17	0.715	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	181.45	0.573	2.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Sample Condition (S,U)/Dilution (PQL)

1 S S S S S S S S S

S: Satisfactory, U: Unsatisfactory

U: see sample narrative

Dilution: numerical dilution factor used to quantitate analyte concentrations within the range of the initial calibration curve

¹ MW: Molecular Weight² MDL: Method detection limit according to EPA 40CFR Part 136 Appendix B³ PQL: Practical quantitation limit using the initial calibration curve low point and dilution factors where applicable

SAMPLE NARRATIVE:

Quality Control Analyst: _____

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Phone: (410)992-6622

9180 Rumsey Rd. Columbia, MD 21045

Fax: (410)992-0347

APPENDIX C

**SOIL BORING LOGS,
MONITORING WELL CONSTRUCTION DETAILS,
AND GROUNDWATER SAMPLING FIELD DATA SHEETS**

SOIL BORING LOG

Point of Interest:

Spring No.: OLD-30-01

Client: NAVY

Project No. 02530.05

Protection: D

Contractor: GPI

Date Stated: 10/9/97

Completed: 10/9/97

Method: Hollow Stem

Casing Size:

PI Meter: Porta FID

Ground Elev.:

Soil Drilled:

Total Depth: 16 ft

Logged by: J. Nash

Checked by:

Below Ground:

Screen: 10 (H.)

iser.

Diam: 2 in (10)

Material: PVC

Page / of: /

[illegible]

PROPORTIONS

Trace (r)
Lima (m)
Some (so)
and

(-) AMOUNT (+)

0-10%
10-20%
20-35%
35-50%

ABBREVIATIONS

l = fine gr = gray
m = medium bn = brown
c = coarse blk = black

MS - Split Spoon
BW - Screened Auger
HP - Hydropunch

SOIL BORING LOG

Client: <u>NAVY</u>		Project No. <u>02530.05</u>	Point of Interest:
Contractor: <u>GPI</u>	Date Started: <u>10/9/97</u>	Boring No.: <u>OLD-30-02</u>	Protection: <u>D</u>
Method: <u>Hollow Stem</u>	Casing Size:	Completed: <u>10/9/97</u>	PI Meter: <u>Porta FID</u>
Ground Elev.:	Soil Drilled:	Total Depth: <u>16 ft</u>	<input checked="" type="checkbox"/> Below Ground:
Logged by: <u>J. Nash</u>	Checked by:	Page <u>1</u> of <u>1</u>	
Screen: <u>10 (ft.)</u>	Riser: <u>5 (ft.)</u>	Diam: <u>2 in (ID)</u>	Material: <u>PVC</u>

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE DEPTH	CLIPSCREENING	RECOVERY	PID (ppm)	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS 6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
5				100%	PH	SAND, fine grained, white-gray	SP	3141			
				100%		- brown, contains organics, wet		4161			
				100%		- medium dense		6171			
10				100%		- loose sand		6181			
				45%				18181			
				100%				211241			
				100%				141151			
15				100%				191261			
				100%				151141			
								161171			
20								181171			
								191191			

PROPORTIONS

Trace (v)
Little (ll)
Some (so)
and

(-) AMOUNT (-)

0-10%
10-20%
20-35%
35-50%

ABBREVIATIONS

f = fine gr = gray
m = medium bn = brown
c = coarse blk = black

MS = Split Spoon
BW = Screened Auger
HP = Hydropunch

SOIL BORING LOG

Point of Interest:

Boring No.: 02D-30-03

Client: NAVY

Project No. 02530.05

Protection: D

Contractor: G P I

Date Started: 10/10/97

Completed: 10/10/97

Method: Hollow Stem

Casing Size:

PI Meter: P_{0.7a} FID

Ground Elev.:

Soil Drilled:

Total Depth: 16 ft

Logged by: J. Nash

Checked by:

Below Ground:

Screen: 10 (ft.)

Riser: 5 (ft.)

Diam: 2 in (ID)

Material: PVC

Page 1 of 1

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE DEPTH	CLIP SHEETING	RECOVERY	PH	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS 6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
5					6.5	SAND, fine grained, white - Lt gray	SP	314			
					80%	- brown, wet		316			
					100%			819			
10					100%			914			
					100%			8112			
					100%	- dense		21132			
					95%			14120			
								31143			
								43143			
								501 +			
								45150H			
								501 +			

PROPORTIONS

(-) AMOUNT (+)

ABBREVIATIONS

Trace (tr)

0-10%

f = fine

gr = gray

MS = Split Spoon

Little (ll)

10-20%

m = medium

bn = brown

BW = Screened Auger

Some (so)

20-35%

c = coarse

blk = black

HP = Hydropunch

and

35-50%

SOIL BORING LOG

Point of Interest:

Boring No.: OLD-30-04

Client: NAVY

Project No. 02530.05

Protection: D

Contractor: GPI

Date Started: 10/10/97

Completed: 10/16/97

Method: Hollow Stem

Casing Size:

PI Meter: Posta FID

Ground Elev.:

Soil Drilled:

Total Depth: 16 ft

Logged by: J. Nash

Checked by:

☒ Below Ground:

Screen: 10 (ft.)

Riser: 5 (ft.)

Diam: 2 1/2 (ID)

Material: PVC

Page 1 of 1

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE DEPTH	CLIP/SCREENING	RECOVERY	PH	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
						SAND, fine sand, white-gray	SP				
5				86%		- wet		313			
				95%				413			
				100%		- brown		315			
10				100%				414			
				100%				618			
				100%				15121			
				100%				16120			
								20132			
								8161			
								615			
15								91101			
								91121			
20											

PROPORTIONS

(-) AMOUNT (+)

ABBREVIATIONS

Trace (r)

0-10%

f = fine

gr = gray

MS = Split Spoon

Little (ll)

10-20%

m = medium

bn = brown

BW = Screened Auger

Some (so)

20-35%

c = coarse

blk = black

HP = Hydropunch

and

35-50%

SOIL BORING LOG				Point of Interest:
Client: NAVY		Project No. 02530.05		Boring No.: OLD-30-05
Contractor: GPI	Date Started: 10/10/97	Protection: D		
Method: Hollow Stem	Casing Size:	Completed: 10/10/97		
Ground Elev.:	Soil Drilled:	PI Meter: Porta FID		
Logged by: J. Nash	Checked by:	Total Depth: 16 ft		
Screen: 10 (ft.)	Riser: 5 (ft.)	Diam: 2 in (ID)	Material: PVC	Below Ground: <input checked="" type="checkbox"/>
Page				of: 1

Spring No.: CLD-30-05

Client: NAVY

Project No. 02530.05

Protection: ☐

Completed: 10/10/97

Contractor: GPI

Date Started: 10/10/97

Completed: 10/10/97

Method: Hollow Stem

Casing Size:

PI Meter: Porta F10

Ground Elev.:

Soil Drilled:

Total Depth: 162 ft

Logged by: J. Nash

Checked by:

Below Ground:

Screen: 10 (n.)

Riser: 5 (ft.)

Diam: 2 in (ID)

Material: PVC

Page

of:

PROPORTIONS

(-) AMOUNT (+)

ABBREVIATIONS

Trace (r)

0-10%

1 - fine

$$\zeta' = \zeta'zy$$

MS - Split Spool

Line (II)

10-20%

က = ကဇိမ်က

החום = brown

BW = Sealed Auger

Some (so)

22-35%

C - 00230

blk = black

HP = Hydropunch

and

SOIL BORING LOG				Point of Interest:
Client: NAVY		Project No. 02530.05		Boring No.: 02D-30-06
Contractor: GPI	Date Started: 10/10/97	Protection: D		
Method: Hollow Stem	Casing Size:	Completed: 10/10/97		
Ground Elev.:	Soil Drilled:	PI Meter: Porta FID		
Logged by: J. Nash	Checked by:	Total Depth: 16 ft		
Screen: 10 (ft.)	Riser: 5 (ft.)	Diam: 2 in (ID)	Material: PVC	<input checked="" type="checkbox"/> Below Ground:
				Page 1 of 1

Spring No.: OLD-30-06

Project No. 02530.05

Protection:

Date Started: 10/10/97

Completed: 10/10/97

Casing Size:

PI Meter: PETA FID

Ground Elev.:

Soil Drilled:

Total Depth: 110 ft

Logged by: J. Nash

Checked by:

 Below Ground:

Screen: 10 (H.)

Riser. 5 (H.)

Diam: 2.5 (10)

Material: PVC

Page / of: /

PROPORTIONS	(-) AMOUNT (+)	ABBREVIATIONS		
Trace (tr)	0-10%	f = fine	gr = gray	MS = Split Spoon
Little (ll)	10-25%	m = medium	bn = brown	BW = Screened Auger
Some (so)	20-35%	c = coarse	blk = black	HP = Hydropunch
and	35-50%			

ABBREVIATIONS

MS - Split Spoon

BW - Screened Auger

HP = Hydropunch

35-50%

SOIL BORING LOG

Point of Interest:

Boring No.: *OLD-30-07*

Client: *NAVY*

Project No. *09530.05*

Protection: *D*

Contractor: *GPI*

Date Started: *10/10/97*

Completed: *10/10/97*

Method: *Hollow Stem*

Casing Size:

PI Meter: *Penta FID*

Ground Elev.:

Soil Drilled:

Total Depth: *16 ft*

Logged by: *J. Nash*

Checked by:

☒ Below Ground:

Screen: *10 (ft.)*

Riser: *5 (ft.)*

Diam: *2 in (ID)*

Material: *PVC*

Page *1* of: *1*

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE DEPTH	CLY/SCHIEENING	RECOVERY	PH	SOIL/ROCK DESCRIPTION	SOIL CLASS	BLOWS/6-IN.	WELL DATA	LITHOLOGY	ELEVATION (FT.)
5						SAND, fine grained, white - Lt. gray	SP				
				80%		- gray, wet		416			
				90%				615			
				100%				516			
10				100%		- brown		616			
				100%				518			
				100%				8110			
				100%				10115			
				100%				17124			
				100%				28124			
				100%				26124			
				100%				25127			
				100%				28133			

PROPORTIONS

(-) AMOUNT (+)

ABBREVIATIONS

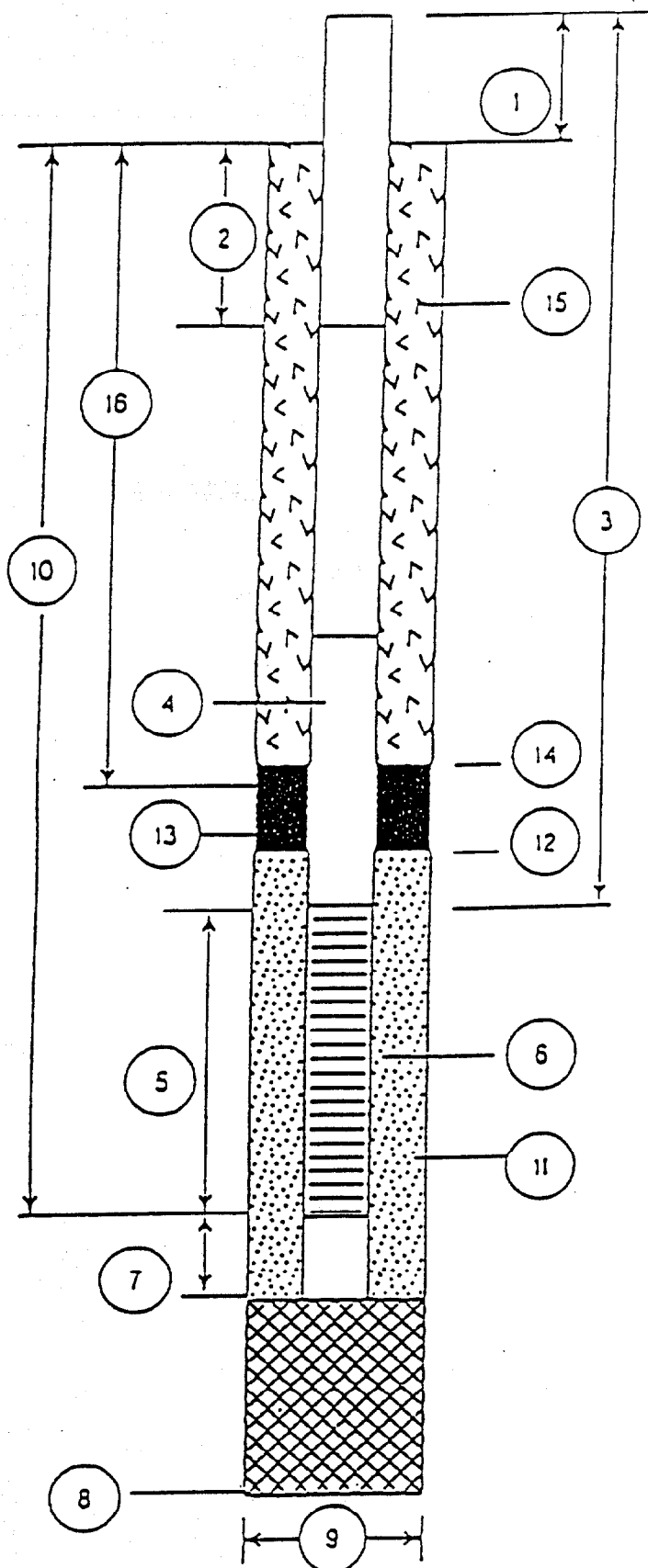
Trace (tr)
Little (l)
Some (so)
and

0-10%
10-20%
20-35%
35-50%

f = fine
m = medium
c = coarse
gr = gray
bn = brown
blk = black

MS = Split Spoon
BW = Screened Auger
HP = Hydropunch

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SC.



WELL CONSTRUCTION DETAIL

WELL NUMBER: OLD-30-01

DATE OF INSTALLATION: 10

1. Height of Casing above ground: FM

2. Depth to first Coupling: 6'

Coupling Interval Depths: NA

3. Total Length of Riser Pipe: 6'

4. Type of Riser Pipe: 2" Sched 40 PVC

5. Length of Screen: 10'

6. Type of Screen: 2" 0.010 slot

7. Length of Sump: 6"

8. Total Depth of Boring: 16'

9. Diameter of Boring: 10"

10. Depth to Bottom of Screen: 16'

11. Type of Screen Filter: Sand

Quantity Used: 450 lb

Size: 20'

12. Depth to Top of Filter: 4'

13. Type of Seal: 30/65 Sand

Quantity Used: NR

14. Depth to Top of Seal: 2'

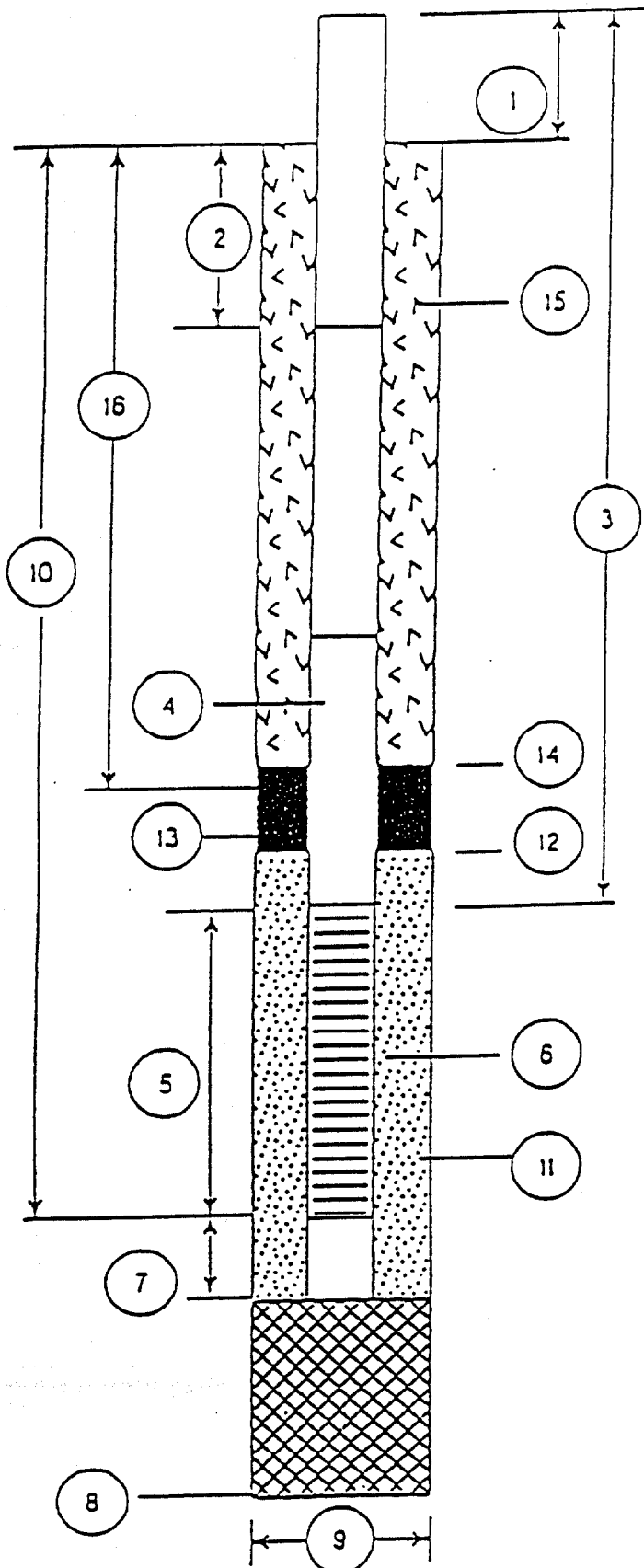
15. Type of Grout: PAD

Grout Mixture:

Method of Placement:

16. Tot. Depth of 6 in. Steel Casing: NA

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SC.



WELL CONSTRUCTION DETAIL

WELL NUMBER: OLD-30-072

DATE OF INSTALLATION: 10-91

1. Height of Casing above ground: FM

2. Depth to first Coupling: 5'

Coupling Interval Depths: NA

3. Total Length of Riser Pipe: 5'

4. Type of Riser Pipe: 2" sched 40 PVC

5. Length of Screen: 10'

6. Type of Screen: 2" 0.010 slot

7. Length of Sump: 6"

8. Total Depth of Boring: 15'

9. Diameter of Boring: 10"

10. Depth to Bottom of Screen: 15'

11. Type of Screen Filter: Sand

Quantity Used: 450

Size: 20/30

12. Depth to Top of Filter: 3

13. Type of Seal: 30/65 sand

Quantity Used: NR

14. Depth to Top of Seal: 1

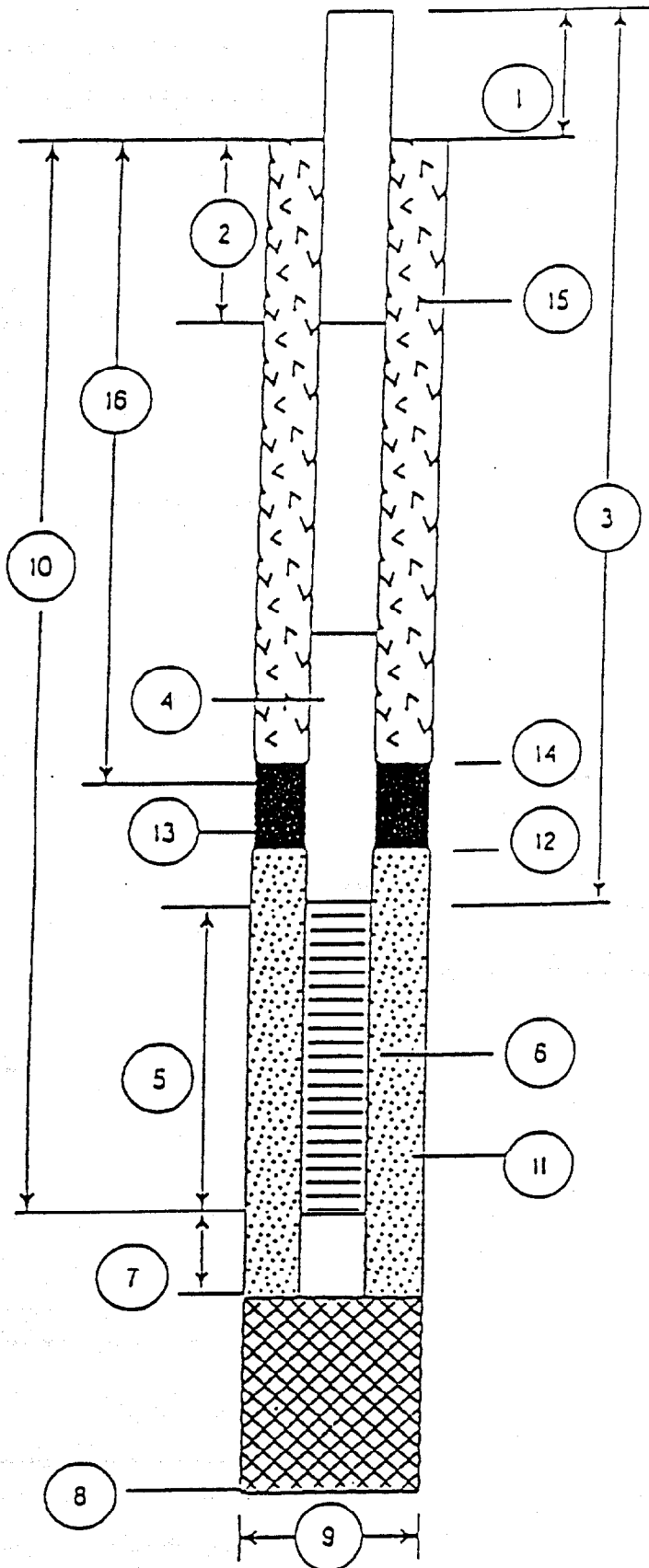
15. Type of Grout: PAD

Grout Mixture:

Method of Placement: ---

16. Tot. Depth of 6 in. Steel Casing: NA

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SC.



WELL CONSTRUCTION DETAIL

WELL NUMBER: OWD-30-23

DATE OF INSTALLATION: 10/

1. Height of Casing above ground: FW

2. Depth to first Coupling: 3'

Coupling Interval Depths: NA

3. Total Length of Riser Pipe: 5'

4. Type of Riser Pipe: 2" sched 40 PVC

5. Length of Screen: 10'

6. Type of Screen: 2" 0.010 slot

7. Length of Sump: 6'

8. Total Depth of Boring: 15'

9. Diameter of Boring: 10"

10. Depth to Bottom of Screen: 15'

11. Type of Screen Filter: Sand

Quantity Used: 600 lbs

Size: 20/60

12. Depth to Top of Filter: 3'

13. Type of Seal: 30/65

Quantity Used: NR

14. Depth to Top of Seal: 1'

15. Type of Grout: PAD

Grout Mixture:

Method of Placement:

16. Tot. Depth of 6 in. Steel Casing: NA

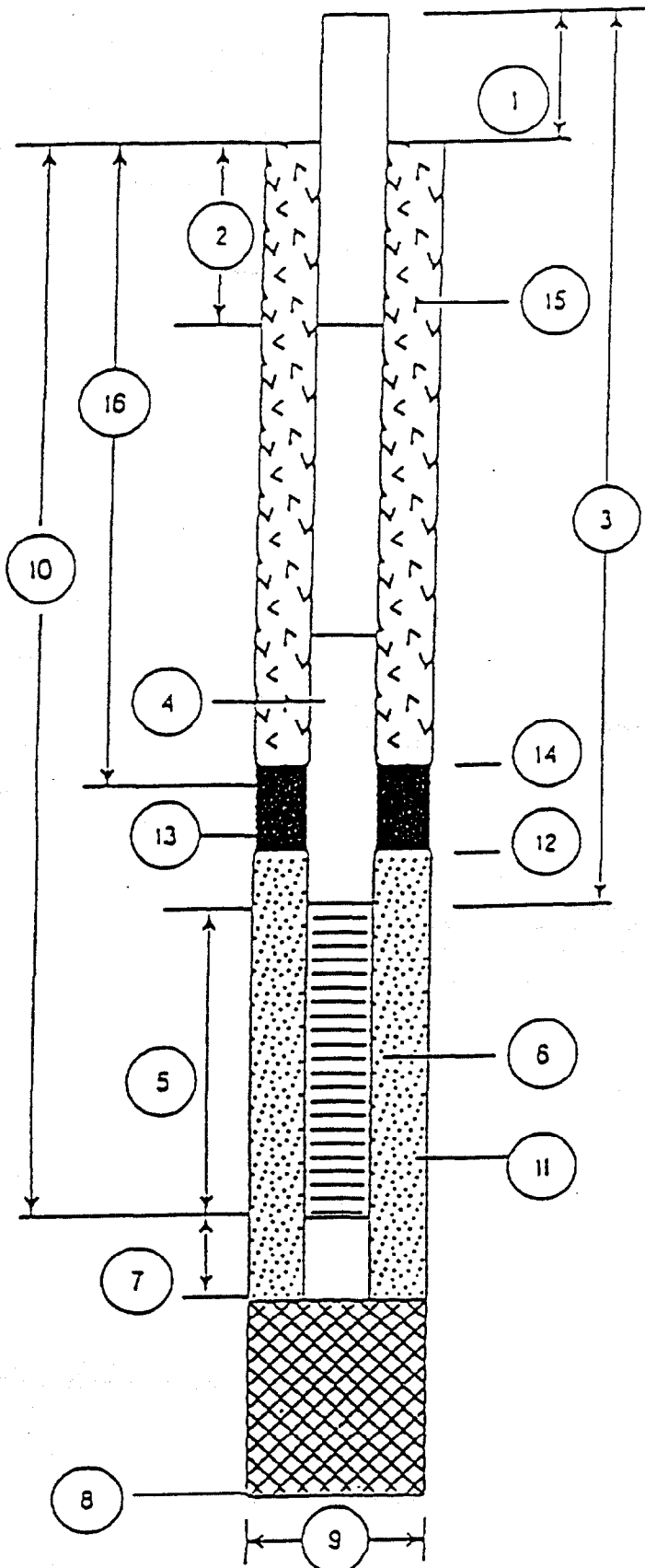
DEPARTMENT OF THE NAVY

SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SC.

WELL CONSTRUCTION DETAIL

WELL NUMBER: OLD-30-04

DATE OF INSTALLATION: 10/10/64



1. Height of Casing above ground: FM

2. Depth to first Coupling: 5'

Coupling Interval Depths: NA

3. Total Length of Riser Pipe: 5'

4. Type of Riser Pipe: 2" Sched 40 PVC

5. Length of Screen: 10'

6. Type of Screen: 0.010 slot 2"

7. Length of Sump: 6"

8. Total Depth of Boring: 15'

9. Diameter of Boring: 10"

10. Depth to Bottom of Screen: 15'

11. Type of Screen Filler: Sand

Quantity Used: 500 lb

Size: 20/30

12. Depth to Top of Filter: 3

13. Type of Seal: 30/65 sand

Quantity Used: NR

14. Depth to Top of Seal: 1

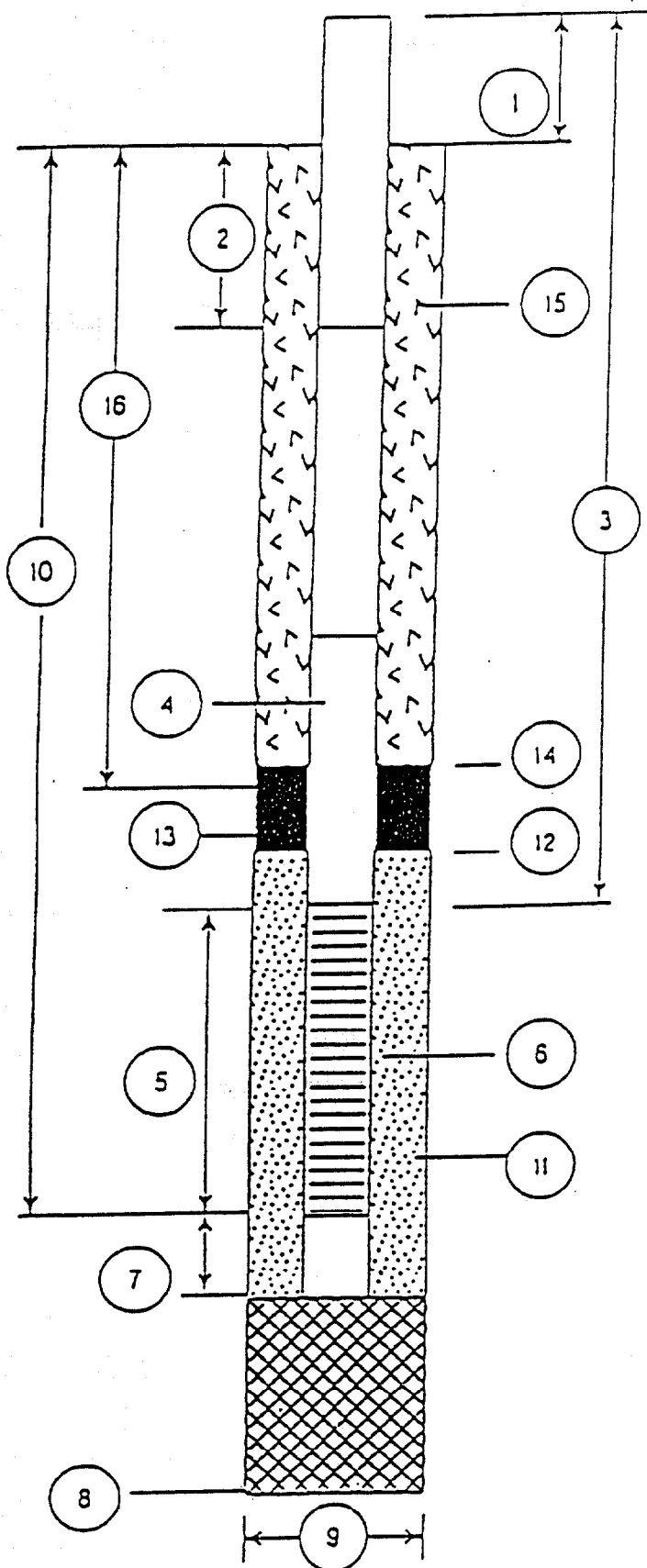
15. Type of Grout: PAD

Grout Mixture:

Method of Placement: FM

16. Tot. Depth of 6 in. Steel Casing: 7'

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SC.



WELL CONSTRUCTION DETAIL

WELL NUMBER: OLD-30-65

DATE OF INSTALLATION: 10

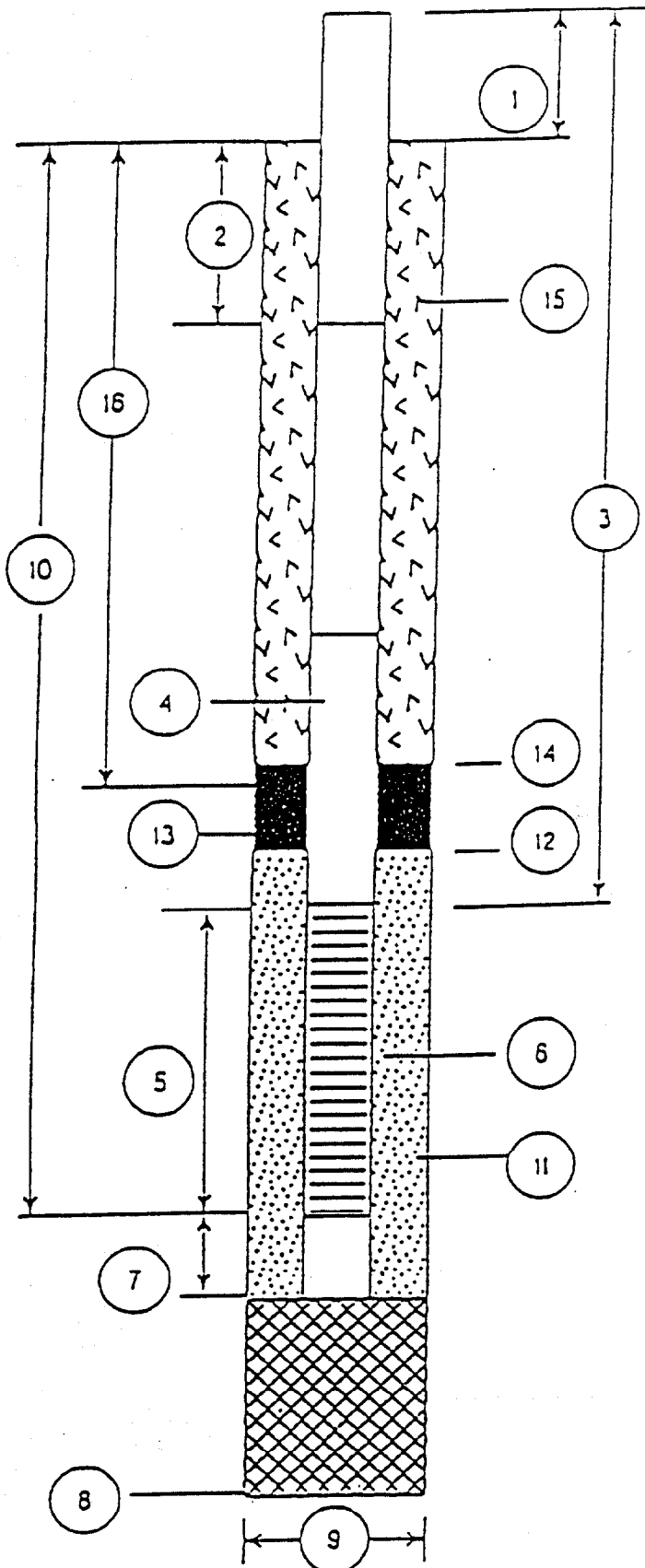
1. Height of Casing above ground: FM
2. Depth to first Coupling: 5'
Coupling Interval Depths: NA
3. Total Length of Riser Pipe: 5'
4. Type of Riser Pipe: 2" Sched 40 PVC
5. Length of Screen: 10'
6. Type of Screen: 2" 0.010 slot
7. Length of Sump: 6"
8. Total Depth of Boring: 15'
9. Diameter of Boring: 10"
10. Depth to Bottom of Screen: 15'
11. Type of Screen Filter: Sand
Quantity Used: 500 LB Size: 20/40
12. Depth to Top of Filter: 3
13. Type of Seal: 30/65 Sand
Quantity Used: NR
14. Depth to Top of Seal: L
15. Type of Grout: PAD
Grout Mixture:
Method of Placement: ---
16. Tot. Depth of 6 in. Steel Casing: NA

CHARLESTON, SC.

15. Tot. Depth of 6 in. Steel Casing: NA

18. Tot. Depth of 6 in. Steel Casing:

DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CHARLESTON, SC.



WELL CONSTRUCTION DETAIL

WELL NUMBER: OLD-3007

DATE OF INSTALLATION: 10

1. Height of Casing above ground: FM

2. Depth to first Coupling: 3'

Coupling Interval Depths: NA

3. Total Length of Riser Pipe: 5'

4. Type of Riser Pipe: 2" sched 40 PVC

5. Length of Screen: 10'

6. Type of Screen: 2" 0.010 Slot

7. Length of Sump: 6'

8. Total Depth of Boring: 15'

9. Diameter of Boring: 10"

10. Depth to Bottom of Screen: 15'

11. Type of Screen Filter: Sand

Quantity Used: 500lb

Size: 20/60

12. Depth to Top of Filter: 3

13. Type of Seal: 30/65 sand

Quantity Used: OR

14. Depth to Top of Seal: 1

15. Type of Grout: PAD

Grout Mixture:

Method of Placement: NA

16. Tot. Depth of 6 in. Steel Casing: NA

GROUNDWATER SAMPLE FIELD DATA

Project: NIC ORLANDO
 Project Number: 02530.05
 Sample Location ID: OLD-30-01
 Time: Start: 1250 End: 1440

Point of Interest: SA30
 Date: 11-12/97
 Signature of Sampler: William D. Olson

Water Level/Well Data

Well Depth 15.81 ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing Well Riser Stick-up FM ft. Protective NA ft. Casing/Well Difference

Depth to Water 7.27 ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer

Height of Water Column 8.54 ft. ☒ 1.6 Gal/P. (2 in.) ☐ 85 Gal/P. (4 in.) ☐ 1.5 Gal/P. (6 in.) ☐ Gal/P. (in.) 1.4 Gal/Vol 8 Total Gal Purged Well Integrity: Prot. Casing Secure ☒ Concrete Collar Intact ☒ Other ☒ Yes ☐ No

Equipment Documentation

Purging/Sampling Equipment Used :

(/ If Used For)

Purging	Sampling	Equipment ID
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Peristaltic Pump
<input type="checkbox"/>	<input type="checkbox"/>	Submersible Pump
<input type="checkbox"/>	<input type="checkbox"/>	Bailer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PVC/Silicon Tubing
<input type="checkbox"/>	<input type="checkbox"/>	Teflon/Silicon Tubing
<input type="checkbox"/>	<input type="checkbox"/>	Airift
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Hand Pump
<input type="checkbox"/>	<input type="checkbox"/>	In-line Filter
<input type="checkbox"/>	<input type="checkbox"/>	Press/Vac Filter

Decontamination Fluids Used :

(/ All That Apply at Location)

- ☐ Methanol (100%)
- ☒ 25% Methanol/75% ASTM Type II water
- ☒ Deionized Water
- ☐ Liquinox Solution
- ☐ Hexane
- ☐ HNO₃/D.I. Water Solution
- ☐ Potable Water
- ☐ None

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ☒ In-line ☐ In Container Sample Observations: ☒ Turbid ☐ Clear ☐ Cloudy ☐ Colored ☐ Odor

Purge Data	Gal	Gal	Gal	Gal	Gal
Temperature, Deg. C	27.0	26.5	26.5	26.5	26.5
pH, units	4.22	4.16	4.21	4.20	4.25
Specific Conductivity	65	68	65	68	69
(unheated @ 25 Deg. C) NTU	177.6	180.1	179.0	178.9	180.1
Oxidation-Reduction, mV					
Dissolved Oxygen, ppm					

Sample Collection Requirements (/ If Required at this Location)

Analytical Parameter	/ If Field Filtered	Preservation Method	Volume Required	/ If Sample Collected	Sample Bottle IDs
VOA		HCL			
SVOA		40C			
Pest/PCB		40C			
Inorganics		HNO ₃			
Explosives		4°C			
TPH		H ₂ SO ₄			
TOC		H ₂ SO ₄			
Nitrate		H ₂ SO ₄			

Notes: 30400101 = filtered metals, 0.45u, Filtered Turbidity = 8.4
30600101 = Full Suite + TPH + TSS
FINAL Turbidity = 178.9 NTU

GROUNDWATER SAMPLE FIELD DATA

Project: NTC ORLANDO
 Project Number: 02530.05
 Sample Location ID: OLD-30-02
 Time: Start: 1035 End: 1235

Point of Interest: SA 30
 Date: 11-12/97
 Signature of Sampler: William A. Olson

Water Level/Well Data

Well Depth: 4.76 ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing
 Well Riser Sock-up: FM ft. (from ground) Protective: NA ft. Casing/Well Difference
 Depth to Water: 4.98 ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia.: ☒ 2 inch ☐ 4 inch ☐ 6 inch
 Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column: 9.78 ft. X ☐ 18 Gal/R. (2 in.) ☐ 65 Gal/R. (4 in.) ☐ 15 Gal/R. (6 in.) ☐ Gal/R. (in.)
 [1.6 Gal Vol 7 Total Gal Purged] Well Integrity: Prot. Casing Secure ☒ Concrete Collar Intact ☒ Other: ☒ Yes ☐ No

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)
 Purging: ☒ Sampling: ☒
 Peristaltic Pump ☐ Equipment ID: _____
 Submersible Pump ☐ _____
 Baker ☐ _____
 PVC/Silicon Tubing ☐ _____
 Teflon/Silicon Tubing ☐ _____
 Airst ☐ _____
 Hand Pump ☐ _____
 In-line Filter ☒ _____
 Press/Vac Filter ☐ _____

Decontamination Fluids Used:

(✓ All That Apply at Location)
☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC: 0 ppm Well Mouth: 0 ppm Field Data Collected: ☒ In-line ☐ In Container Sample Observations: ☐ Turbid ☐ Clear ☒ Cloudy
☐ Colored ☐ Odor
 Purge Data: 3 Gal @ 4 Gal @ 5 Gal @ 6 Gal @ 7 Gal.

Temperature, Deg. C	<u>27.5</u>	<u>28.0</u>	<u>27.5</u>	<u>28.0</u>	<u>28.0</u>
pH, units	<u>6.88</u>	<u>6.75</u>	<u>6.88</u>	<u>6.85</u>	<u>6.92</u>
Specific Conductivity	<u>262</u>	<u>255</u>	<u>275</u>	<u>278</u>	<u>280</u>
(unheated, @ 25 Deg. C) NTU	<u>56.1</u>	<u>54.6</u>	<u>58.5</u>	<u>58.2</u>	<u>46.5</u>
Oxidation-Reduction, mV					
Dissolved Oxygen, ppm					

Sample Collection Requirements

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA		HCL			/ / / /
SVOA		40C			/ / / /
Pest/PCB		40C			/ / / /
Inorganics		HNO ₃			/ / / /
Explosives		4°C			/ / / /
TPH		H ₂ SO ₄			/ / / /
TOC		H ₂ SO ₄			/ / / /
Nitrate		H ₂ SO ₄			/ / / /

Notes:

30400201 = filtered metals, 0.45 µm, f: (fined) Turb. = 23.8 NTU
 30600201 = Full suite + TPH + TSS
 Final Turbidity = 53.1 NTU

GROUNDWATER SAMPLE FIELD DATA

Project: NLC ORLANDO
 Project Number: 02530.05
 Sample Location ID: 04A-20-02
 Time: Start: 1030 End: 1205

Point of Interest: SA30
 Date: 2-11-98
 Signature of Sampler: Willie Polson

Water Level/Well Data

Well Depth: 14.60 ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing
 Well Riser Stick-up: FM ft. (from ground) Protective Casing/Well Difference: AM ft.
 Protective Casing: FM ft.
 Depth to Water: 3.96 ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia.: ☒ 2 inch ☐ 4 inch ☐ 6 inch
 Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column: 10.62 ft. ☒ 1.8 Gal/R. (2 in.) ☐ 8.5 Gal/R. (4 in.) ☐ 1.5 Gal/R. (6 in.) ☐ Gal/R. (in.)
 [1.7 Gal Vol 6 Total Gal Purged] Well Integrity: ☐ Prot. Casing Secure ☐ Concrete Collar Intact ☐ Other: NA
 Yes ☒ No ☐

Equipment Documentation

Pumping/Sampling Equipment Used:

(☒ if Used For)
 Pumping ☒ Sampling
 Peristaltic Pump ☐ Equipment ID: _____
 Submersible Pump ☐ _____
 Baler ☐ _____
 PVC/Silicon Tubing ☐ _____
 Teflon/Silicon Tubing ☒ _____
 Airtight ☐ _____
 Hand Pump ☐ _____
 In-line Filter ☒ _____
 Press/Vac Filter ☐ _____

Decontamination Fluids Used:

(☒ All That Apply at Location)
☐ Methanol (100%)
☒ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/DI Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC: 0 ppm Well Mouth: 0 ppm Field Data Collected: ☒ In-line ☐ In Container Sample Observations: ☐ Turbid ☒ Clear ☐ Cloudy
☐ Colored ☐ Odor
 Purge Data: 1st Gal. @ 2 Gal. @ 5 Gal. @ 5.1 Gal. @ 6 Gal.

Temperature, Deg. C	<u>21.9</u>	<u>22.7</u>	<u>22.9</u>	<u>22.8</u>	<u>22.7</u>
pH, units	<u>6.69</u>	<u>6.57</u>	<u>6.66</u>	<u>6.71</u>	<u>6.73</u>
Specific Conductivity (umhos/cm. @ 25 Deg. C)	<u>500</u>	<u>498</u>	<u>493</u>	<u>492</u>	<u>489</u>
Oxidation-Reduction, mv	<u>17.99</u>	<u>13.63</u>	<u>15.45</u>	<u>15.61</u>	<u>15.22</u>
Dissolved Oxygen, ppm					

Sample Collection Requirements (☒ if Required at this Location)

Analytical Parameter	<input checked="" type="checkbox"/> if Field Filtered	Preservation Method	Volume Required	<input checked="" type="checkbox"/> if Sample Collected	Sample Bottle IDs
VOA	<input type="checkbox"/>	HCL		<input type="checkbox"/>	
SVOA	<input type="checkbox"/>	40C		<input type="checkbox"/>	
Pest/PCS	<input type="checkbox"/>	40C		<input type="checkbox"/>	
Inorganics	<input type="checkbox"/>	HNO ₃		<input type="checkbox"/>	
Explosives	<input type="checkbox"/>	4°C		<input type="checkbox"/>	
TPH	<input type="checkbox"/>	H ₂ SO ₄		<input type="checkbox"/>	
TOC	<input type="checkbox"/>	H ₂ SO ₄		<input type="checkbox"/>	
Nitrate	<input type="checkbox"/>	H ₂ SO ₄		<input type="checkbox"/>	

Notes: _____

30 G 00202 = TAC metals
 30 H 00202 = filtered metals
 filtered turbidity = 0.72 NTU

GROUNDWATER SAMPLE FIELD DATA

Project: NTC ORLANDO Point of Interest: SA 30
 Project Number: 02530.05 Date: 11-12/97
 Sample Location ID: OLD-30-03
 Time: Start: 0801 End: 1020 Signature of Sampler: William D. Olson

Water Level/Well Data

Well Depth 14.88 ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing
 Well Riser Sock-up FM ft. (from ground) Protective NA ft. Casing/Well Difference
 Depth to Water 5.58 ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch
 Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column ☒ 1.6 Gal/R. (2 in.) ☐ 8.5 Gal/R. (4 in.) ☐ 1.5 Gal/R. (6 in.) ☐ Gal/R. (in.)
 [1.5 Gal/R. 9 Total Gal Purged]
 Well Integrity: Prot. Casing Secure ☒ Yes ☐ No
 Concrete Collar Intact ☒ Yes ☐ No
 Other ☒ Yes ☐ No

Equipment Documentation

Purging/Sampling Equipment Used :

(✓ If Used For)
 Pumping Sampling
☒ ☒
☐ ☐
☐ ☐
☒ ☒
☐ ☐
☐ ☒
☐ ☐
☐ ☐
 Equipment ID
 Peristaltic Pump
 Submersible Pump
 Bailor
 PVC/Silicon Tubing
 Teflon/Silicon Tubing
 Airtight
 Hand Pump
 In-line Filter
 Press/Vac Filter

Decontamination Fluids Used :

(✓ All That Apply at Location)
☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ☒ In-line ☐ In Container Sample Observations: ☒ Turbid ☐ Clear ☐ Cloudy
☐ Colored ☐ Odor

Purge Data	@ 3 Gal.	@ 4 Gal.	@ 5 Gal.	@ 7 Gal.	@ 9 Gal.
Temperature, Deg. C	26.0	26.5	26.5	27.0	26.5
pH, units	6.35	6.39	6.62	6.61	6.72
Specific Conductivity	420	420	412	410	410
(temperat. @ 25 Deg. C) NTU	103.1	88.0	94.0	98.0	119.9
Oxidation Reduction, mV					
Dissolved Oxygen, ppm					

Sample Collection Requirements

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOC		HCL			
SVOC		40C			
Pest/PCB		40C			
Inorganics		HNO ₃			
Explosives		4°C			
TPH		H ₂ SO ₄			
TOC		H ₂ SO ₄			
Nitrate		H ₂ SO ₄			

Notes:

30H00301/D, Filtered metals, 0.45u, Filtered Turb = 6
 30G00301 = Full suite + TPH + TSS
 30G00301D = Full suite + TSS
 Final Turbidity 140.5 NTU

GROUNDWATER SAMPLE FIELD DATA

Project: NTC ORLANDO
 Project Number: 02530.05
 Sample Location ID: OLD 30-03
 Time: Start: 1215 End: 1350

Point of Interest: SA30
 Date: 2-11-98
 Signature of Sampler: [Signature]

Water Level/Well Data

Well Depth 14.76 ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing
 Well Riser Stick-up FM ft. (from ground) Protective FM ft. Casing/Well Difference
 Depth to Water 4.72 ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch
 Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer
 Height of Water Column ☒ 10.04 ft. ☐ 18 Gal/R. (2 in.) ☐ 65 Gal/R. (4 in.) ☐ 1.5 Gal/R. (8 in.) ☐ Gal/R. (in.)
 [1.6 Gal/Vol] 5 1/2 Total Gal Purged
 Well Integrity: ☒ Prot. Casing Secure ☐ Concrete Collar Intact ☐ Other
 Yes ☒ No ☐

Equipment Documentation

Pumping/Sampling Equipment Used:

(✓ if Used For)	Equipment ID
Pumping <input checked="" type="checkbox"/> Sampling <input checked="" type="checkbox"/>	
<input type="checkbox"/>	Peristaltic Pump
<input type="checkbox"/>	Submersible Pump
<input type="checkbox"/>	Bailer
<input checked="" type="checkbox"/>	PVC/Silicon Tubing
<input type="checkbox"/>	Teflon/Silicon Tubing
<input type="checkbox"/>	Airlift
<input type="checkbox"/>	Hand Pump
<input checked="" type="checkbox"/>	In-line Filter
<input type="checkbox"/>	Press/Vac Filter

Decontamination Fluids Used:

(✓ All That Apply at Location)
☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ☒ In-line ☐ In Container Sample Observations: ☐ Turbid ☐ Clear ☒ Cloudy
☐ Colored ☐ Odor

Purge Data	Gal	10/17 Gal	2.5 Gal	5 Gal	5 1/2 Gal
Temperature, Deg. C		<u>23.4</u>	<u>23.9</u>	<u>23.8</u>	<u>23.3</u>
pH, units		<u>6.70</u>	<u>6.65</u>	<u>6.71</u>	<u>6.74</u>
Specific Conductivity		<u>355</u>	<u>230</u>	<u>228</u>	<u>230</u>
(unfiltered, @ 25 Deg. C) NTU		<u>38.9</u>	<u>39.4</u>	<u>41.8</u>	<u>44.5</u>
Oxidation-Reduction, mv					
Dissolved Oxygen, ppm					

Sample Collection Requirements (✓ if Required at this Location)

Analytical Parameter	✓ if Field Filtered	Preservation Method	Volume Required	✓ if Sample Collected	Sample Bottle IDs
VOA		HCL			
SVOA		40C			
Pest/PCB		40C			
Inorganics		HNO ₃			
Explosives		4°C			
TPH		H ₂ SO ₄			
TOC		H ₂ SO ₄			
Nitrate		H ₂ SO ₄			

Notes:

306.00302 = TAL metals
 304.00302 = filtered metals
 filt. turb = 1.37 NTU

GROUNDWATER SAMPLE FIELD DATA

Project: NTC ORLANDO

Point of Interest: SA 30

Project Number: 02530.05

Date: 11-11/97

Sample Location ID: OLD-30-04

Time: Start: 1210 End: 1430

Signature of Sampler: William D. Olson

Water Level/Well Data

Well Depth 14.89 ft. ☒ Measured ☐ Historical ☒ Top of Well ☐ Top of Protective Casing

Well Riser Stick-up FM ft. (from ground) Protective NA ft. Casing/Well Difference

Depth to Water 6.61 ft. Well Material: ☒ PVC ☐ SS Well Locked?: ☒ Yes ☐ No

Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch

Water Level Equip. Used: ☒ Elect. Cond. Probe ☐ Float Activated ☐ Press. Transducer

Height of Water Column 8.26 ft. ☒ 1.5 Gal/P. (2 in.) ☐ 1.5 Gal/P. (4 in.) ☐ 1.5 Gal/P. (6 in.) ☐ Gal/P. (in.)

1.3 Gal/Vol 9 Total Gal Purged

Well Integrity: Prot. Casing Secure ☒ Concrete Collar Intact ☒ Other ☐ Yes ☐ No

Equipment Documentation

Purging/Sampling Equipment Used:

Decontamination Fluids Used:

(/ if Used For)

Purging ☒ Sampling ☒

☐ ☐

☐ ☐

☒ ☒

☐ ☐

☐ ☒

☐ ☐

☐ ☐

☐ ☐

Penstabil Pump
Submersible Pump
Bailer
PVC/Silicon Tubing
Teflon/Silicon Tubing
Airtight
Hand Pump
In-line Filter
Press/Vac Filter

Equipment ID

(/ All That Apply at Location)

☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☐ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ☒ In-line ☐ In Container

Sample Observations: ☐ Turbid ☐ Clear ☒ Cloudy
☐ Colored ☐ Odor

Purge Data	5 gal	6 3/4 Gal	7 1/2 Gal	8 1/2 Gal	9 Gal
Temperature, Deg. C	29.0	29.0	29.0	29.0	29.0
pH, units	7.08	6.91	6.90	6.90	6.94
Specific Conductivity	380	380	380	380	376
Turbidity/cm @ 25 Deg. C NTU	58.1	49.1	38.9	38.8	48.6
Oxidation-Reduction, mv					
Dissolved Oxygen, ppm					

Sample Collection Requirements

Analytical Parameter	/ if Field Filtered	Preservation Method	Volume Required	/ if Sample Collected	Sample Bottle IDs
VOC		HCL			
SVOC		40C			
Pest/PCB		40C			
Inorganics		HNO ₃			
Explosives		40C			
TPH		H ₂ SO ₄			
TOC		H ₂ SO ₄			
Nitrate		H ₂ SO ₄			

Notes: 30H00401 = filtered metals, 0.45 u, Filtered Turb. = 0.60 NTU
30G00401 = Full Suite + TPH + TSS
Final Turbidity = 53.0 NTU

GROUNDWATER SAMPLE FIELD DATA

Point of Interest: SA 30

Date: 11-13-97

Signed _____

Signature of Sampler: W. J. P. O.

Protective NA R.
Casing/Well Difference

Water Level Equip. Used:
☒ Elec. Cond. Probe
☐ Float Activated
☐ Press. Transducer

Well Integrity:
 Prot. Casing Secure
 Concrete Collar Intact
 Other _____

Yes	No
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

Equipment Documentation

Decontamination Fluids Used :

(✓ All That Apply at Location)

☐ Methanol (100%)

☒ 25% Methanol/75% ASTM Type II water

☒ Deionized Water

☐ Liquinex Solution

☐ Hexane

☐ HNO₃/D.I. Water Solution

☐ Potable Water

☐ None

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected X In-line In Container X Turbid X Clear Cloudy
Colored Odor

Sample Collection Requirements
(✓ If Required at this Location)

Analytical Parameter	# Field Filtered	Preservation Method	Volume Required	# Sample Collected	Sample Bottle IDs			
VOA	_____	HCL	_____	_____	_____	_____	_____	_____
SVOA	_____	40C	_____	_____	_____	_____	_____	_____
Pest/PCB	_____	40C	_____	_____	_____	_____	_____	_____
Inorganics	_____	HNO ₃	_____	_____	_____	_____	_____	_____
Explosives	_____	4°C	_____	_____	_____	_____	_____	_____
TPH	_____	H ₂ SO ₄	_____	_____	_____	_____	_____	_____
TOC	_____	H ₂ SO ₄	_____	_____	_____	_____	_____	_____
Nitrate	_____	H ₂ SO ₄	_____	_____	_____	_____	_____	_____

Notes:

$30600501 = \text{Full Solids} + \text{TPH} + \text{TSS}$
 $30400501 = \text{Filtered metals}$
 $\text{Filtered turbidity} = 1.6 \text{ NTU}$
 $\text{Final turbidity} = 19.2 \text{ NTU}$

GROUNDWATER SAMPLE FIELD DATA

Project: NTC ORLANDO

Point of Interest: SA30

Project Number: 02530.03

Date: 11-13-97

Sample Location ID: OLD-30-06

Time: Start: 1150 End: 1330

Signature of Sampler: [Signature]

Water Level/Well Data

Well Depth 14.95 ft. ☒ Measured ☐ Historical

☒ Top of Well
☐ Top of Protective Casing

Well Riser Stick-up FM ft. (from ground)

Protective Casing/Well Difference NA ft.

Protective Casing NA ft.

Depth to Water 11.35 ft.

Well Material: ☒ PVC ☐ SS

Well Locked?: ☒ Yes ☐ No

Well Dia. ☒ 2 inch ☐ 4 inch ☐ 6 inch

Water Level Equip. Used: ☒ Elec. Cond. Probe ☐ Float Activated ☐ Press. Transducer

Height of Water Column ☒ 1.8 Gal/R. (2 in.) ☒ 85 Gal/R. (4 in.) ☐ 1.5 Gal/R. (6 in.) ☐ Gal/R. (in.)

0.54 Gal/Vol
3 Total Gal Purged

Well Integrity: ☐ Prot. Casing Secure ☐ Concrete Collar Intact ☐ Other

Yes ☒ No ☐

Equipment Documentation

Purging/Sampling Equipment Used:

Decontamination Fluids Used:

(☒ If Used For)
Purging ☒ Sampling

Peristaltic Pump
Submersible Pump
Saler
PVC/Silicon Tubing
Teflon/Silicon Tubing
Airlift
Hand Pump
In-line Filter
Press/Vac Filter

Equipment ID

(☒ All That Apply at Location)

☐ Methanol (100%)
☒ 25% Methanol/75% ASTM Type II water
☒ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/DI Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected ☒ In-line ☐ In Container ☐ Turbid ☐ Colored ☒ Cloudy

Purge Data	1	2	3	4
Temperature, Deg. C	26.0	26.5	27.0	27.0
pH, units	6.85	6.49	6.40	6.41
Specific Conductivity (umhos/cm @ 25 Deg. C, NTU)	240	215	205	198
Oxidation-Reduction, mv	21.3	20.4	22.2	20.8
Dissolved Oxygen, ppm				

Sample Collection Requirements

Analytical Parameter	<input checked="" type="checkbox"/> If Field Filtered	Preservation Method	Volume Required	<input checked="" type="checkbox"/> If Sample Collected	Sample Bottle IDs
VOA		HCL			
SVOA		40C			
pest/PCB		40C			
Inorganics		HNO ₃			
Explosives		4°C			
TPH		H ₂ SO ₄			
TOC		H ₂ SO ₄			
Nitrate		H ₂ SO ₄			
Notes:	<p>30G 00601 = Full Suite + TPH + TSS 30 H 00601 = Filtered metals Filtered turbidity = 12.48 NTU Final Turbidity = 102.8 NTU</p>				

GROUNDWATER SAMPLE FIELD DATA

Point of Interest: 11-11/97

Date: 11-11/97

Signature of Sampler: William D. Olson

Signature of Sampler: William D. Olson

Water Level/Well Data

Well Depth <u>14.98</u> Ft.	<input checked="" type="checkbox"/> Measured <input type="checkbox"/> Historical	<input checked="" type="checkbox"/> Top of Well <input type="checkbox"/> Top of Protective Casing	Well Riser Sock-up <u>FM</u> Ft. (from ground)	Protective <u>NA</u> Ft. Casing/Well Difference
				Protective <u>NA</u> Ft. Casing
Depth to Water <u>7.01</u> Ft.	Well Material: <input checked="" type="checkbox"/> PVC <input type="checkbox"/> SS	Well Locked?: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Well Dia. <input checked="" type="checkbox"/> 2 in. <input type="checkbox"/> 4 in. <input type="checkbox"/> 6 in.	Water Level Equip. Used: <input checked="" type="checkbox"/> Elect. Cond. Probe <input type="checkbox"/> Float Activated <input type="checkbox"/> Press. Transducer
Height of Water Column <u>7.97</u> Ft.	<input checked="" type="checkbox"/> 16 Gal/R. (2 in.) <input type="checkbox"/> 85 Gal/R. (4 in.) <input type="checkbox"/> 1.5 Gal/R. (6 in.) <input type="checkbox"/> Gal/R. (in.)	<div style="display: flex; align-items: center;"> <div style="font-size: 4em; margin-right: 10px;">[</div> <div style="text-align: center;"> <u>1.3</u> Gal/Vol <u>7</u> Total Gal Purged </div> </div>		Well Integrity: Prot. Casing Secure <input checked="" type="checkbox"/> Concrete Collar Intact <input checked="" type="checkbox"/> Other <input type="checkbox"/>
				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

Equipment Documentation	<u>Purchase/Sampling Equipment Used :</u>		<u>Decontamination Fluids Used :</u>	
	(✓ If Used For)			(✓ All That Apply at Location)
	Pumping	Sampling	Equipment ID	
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Peristaltic Pump	<input type="checkbox"/> Methanol (100%)
	<input type="checkbox"/>	<input type="checkbox"/>	Submersible Pump	<input type="checkbox"/> 25% Methanol/75% ASTM Type II water
	<input type="checkbox"/>	<input type="checkbox"/>	Baler	<input checked="" type="checkbox"/> Deionized Water
	<input type="checkbox"/>	<input type="checkbox"/>	PVC/Silicon Tubing	<input type="checkbox"/> Liquinox Solution
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Teflon/Silicon Tubing	<input type="checkbox"/> Hexane
	<input type="checkbox"/>	<input type="checkbox"/>	Airfit	<input type="checkbox"/> HNO ₃ /D.I. Water Solution
	<input type="checkbox"/>	<input type="checkbox"/>	Hand Pump	<input type="checkbox"/> Potable Water
<input type="checkbox"/>	<input checked="" type="checkbox"/>	In-line Filter	<input type="checkbox"/> None	
<input type="checkbox"/>	<input type="checkbox"/>	Press/Vac Filter	<input type="checkbox"/> _____	
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/> _____	

Field Analysis Data

Ambient Air VOC 0 ppm Well Mouth 0 ppm Field Data Collected X In-line In Container Sample Observations: Turbid X Clear Cloudy Colored Odor

Purge Data	@ INIT Gal	@ 2 Gal	@ 4 Gal	@ 5 Gal	@ 7 Gal
Temperature, Deg. C	26.0	27.0	27.0	26.5	27.0
pH, units	5.97	6.51	6.70	6.69	6.72
Specific Conductivity	290	295	285	295	295
Turnback @ 25 Deg. C @ INIT	18.2	11.32	11.79	15.01	12.59
Oxidation-Reduction, mV					
Dissolved Oxygen, ppm					

Analytical Parameter	✓ # Field Filtered	Preservation Method	Volume Required	✓ # Sample Collected	Sample Bottle IDs
VOA	_____	HCL	_____	_____	_____/_____/_____/_____
SVOA	_____	40C	_____	_____	_____/_____/_____/_____
Pest/PCB	_____	40C	_____	_____	_____/_____/_____/_____
Inorganics	_____	HNO ₃	_____	_____	_____/_____/_____/_____
Explosives	_____	4°C	_____	_____	_____/_____/_____/_____
TPH	_____	H ₂ SO ₄	_____	_____	_____/_____/_____/_____
TOC	_____	H ₂ SO ₄	_____	_____	_____/_____/_____/_____
Nitrate	_____	H ₂ SO ₄	_____	_____	_____/_____/_____/_____

Notes: _____

GROUNDWATER SAMPLE FIELD DATA

Project: NTC ORLANDO Point of Interest: SA 30
 Project Number: 02530.05 Date: 11-13/97
 Sample Location ID: OLD-30-"08" Existing Compliance well for waste O.L. VST
 Time: Start: 0745 End: 0902 Signature of Sampler: W. D. D.

Water Level/Well Data

Well Depth 12.07 Ft. ☐ Measured ☐ Top of Well ☐ Well Riser Stick-up ☐ Ft. ☐ Protective ☐ Ft.
☐ Historical ☐ Top of Protective Casing (from ground) ☐ Casing/Well Difference
 Depth to Water ☐ Ft. Well Material: ☐ PVC ☐ Well Locked?: ☐ Yes ☐ Well Dia. ☐ 2 inch ☐ Water Level Equip. Used:
☐ SS ☐ No ☐ 4 inch ☐ Elect. Cond. Probe
☐ ☐ 6 inch ☐ Float Activated
☐ ☐ ☐ Press. Transducer
 Height of Water Column X ☐ 16 Gal/R. (2 in.) ☐ Gal/Vol Well Integrity: ☐ Yes ☐ No
☐ 85 Gal/R. (4 in.) ☐ Prot. Casing Secure
☐ 1.5 Gal/R. (6 in.) ☐ Concrete Collar Intact
☐ Gal/R. (in.) ☐ Total Gal Purged ☐ Other ☐

Equipment Documentation

Purging/Sampling Equipment Used :

Decontamination Fluids Used :

(✓ If Used For)
 Purging Sampling

☐ Peristaltic Pump
☐ Submersible Pump
☐ Bailor
☐ PVC/Silicon Tubing
☐ Teflon/Silicon Tubing
☐ Airlift
☐ Hand Pump
☐ In-line Filter
☐ Press/Vac Filter

Equipment ID

☐
☐
☐
☐
☐
☐
☐
☐

(✓ All That Apply at Location)

☐ Methanol (100%)
☐ 25% Methanol/75% ASTM Type II water
☐ Deionized Water
☐ Liquinox Solution
☐ Hexane
☐ HNO₃/D.I. Water Solution
☐ Potable Water
☐ None

Field Analysis Data

Ambient Air VOC ☐ ppm Well Mouth ☐ ppm Field Data Collected ☐ In-line ☐ Turbid ☐ Clear ☐ Cloudy
☐ In Container ☐ Colored ☐ Odor

Purge Data	@	Gal.	@	Gal.	@	Gal.	@	Gal.	@	Gal.
Temperature, Deg. C										
pH, units										
Specific Conductivity										
(umhos/cm. @ 25 Deg. C.)										
Oxidation - Reduction, mV										
Dissolved Oxygen, ppm										

Sample Collection Requirements

Analytical Parameter	✓ If Field Filtered	Preservation Method	Volume Required	✓ If Sample Collected	Sample Bottle IDs
VOA	<input type="checkbox"/>	HCL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SVOA	<input type="checkbox"/>	40C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pest/PCB	<input type="checkbox"/>	40C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inorganics	<input type="checkbox"/>	HNO ₃	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explosives	<input type="checkbox"/>	4°C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TPH	<input type="checkbox"/>	H ₂ SO ₄	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOC	<input type="checkbox"/>	H ₂ SO ₄	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nitrate	<input type="checkbox"/>	H ₂ SO ₄	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Notes:

☐
☐
☐

APPENDIX D

SUMMARY OF POSITIVE DETECTIONS TABLES

Table D-1	Summary of Positive Detections in Surface Soil
Table D-2	Summary of Positive Detections in Subsurface Soil
Table D-3	Summary of Positive Detections in Groundwater

TABLE D-1

SUMMARY OF POSITIVE DETECTIONS IN SURFACE SOIL

Appendix D
Table D-1. Summary of Positive Detections in Surface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701
Sampling Date					10/23/97	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Volatile Organics, ug/kg											
2-Butanone		2,200,000	47,000,000 n	1,000,000,000 n							22
Semivolatile Organics, ug/kg											
Acenaphthene											14 J
Acenaphthylene		670,000	2,300,000 n	61,000,000 n						12 J	16 J
Anthracene		20000000	23,000,000 n	610000000 n	15 J						12 J
Benzo(a)anthracene		1,400	880 c	7,800 c	130 J			8 J		15 J	32 J
Benzo(a)pyrene		100	88 c	780 c	140 J		11 J	10 J	7 J	38 J	44 J
Benzo(b)fluoranthene		1,400	880 c	7,800 c	270 J	12 J	13 J	16 J	13 J	55 J	84 J
Benzo(g,h,i)perylene		14,000	2300000 n	61,000,000 n	56 J			5 J		13 J	28 J
Benzo(k)fluoranthene		14,000	8,800 c	78,000 c	110 J			7 J			35 J
Butylbenzylphthalate		15,000,000	16,000,000 n	410,000,000 n		58 J	73 J		69 J		54 J
Chrysene		140,000	88,000 c	780,000 c	100 J	7 J		10 J	8 J	16 J	39 J
Di-n-butylphthalate		7,300,000	7,800,000 n	200,000,000 n							
Dibenzofuran		240,000	310,000 n	8,200,000 n							16 J
Fluoranthene		2,900,000	3,100,000 n	82,000,000 n	100 J	11 J	6 J	12 J	12 J	17 J	42 J
Fluorene		2,400,000	3,100,000 n	82,000,000 n							16 J
Indeno(1,2,3-cd)pyrene		1400	880 c	7,800 c	79 J					21 J	38 J
Naphthalene		1300000	3,100,000 n	82,000,000 n							42 J
Phenanthrene		1,700,000	2,300,000 n	61,000,000 n							31 J
Pyrene		2,200,000	2,300,000 n	61,000,000 n	140 J	12 J		15 J	12 J	34 J	53 J
Pesticides/PCBs, ug/kg											
4,4'-DDD		4500	2,700 c	24,000 c							
4,4'-DDE		3000	1,900 c	17,000 c							
4,4'-DDT		3100	1,900 c	17,000 c	0.2 J						0.74 J
Aldrin		60	38 c	340 c			0.09 J			0.57 J	0.23 J
alpha-Chlordane		800	490 c	4,400 c	0.1 J	1.2 J	0.06 J	0.12 J		18	
Aroclor-1260		900	ND	ND				46			
beta-BHC		600	350 c	3,200 c				0.1 J		0.21 J	0.4 J
delta-BHC		23000	350 c	3,200 c				0.07 J	0.11 J		
Dieldrin		70	40 c	360 c	0.26 J	0.15 J	2.1 J	0.82 J	1.9 J	3.9 J	0.24 J
Endosulfan sulfate		ND	ND	ND				3.8 J			

Appendix D
Table D-1. Summary of Positive Detections in Surface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701
Sampling Date					10/23/97	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Endrin		23000	23,000 n	610,000 n						0.93 J	
Endrin ketone		ND	ND	ND	0.87 J					1.2 J	0.26 J
gamma-BHC (Lindane)		800	490 c	4,400 c	0.4 J	0.08 J					
gamma-Chlordane		800	490 c	4,400 c	0.47 J	0.78 J	0.13 J	0.36 J	0.07 J	10 J	0.21 J
Heptachlor		200	140 c	1,300 c	0.06 J		0.06 J				
Heptachlor epoxide		100	70 c	630 c						1.4 J	
Methoxychlor		380000	390,000 n	10,000,000 n	8.4 J					19 J	
Herbicides, ug/kg											
2,4-DB		610,000	630,000 n	16,000,000 n							
MCPP		77,000	78,000 n	2,000,000 n							
Inorganics, mg/kg											
Aluminum	2088	75000	78,000 n	1,000,000 n	815	126	267	317	106	907	321
Arsenic	1.0	0.8	0.43 /23 c/n	3.8 c/610 c/n						0.91 J	
Barium	8.7	5,200.0	5,500 n	140,000 n	13.3 J	2.2 J	2.8 J	3.9 J	2.4 J	5.9 J	5.1 J
Beryllium	ND	0.2	0.15 c	1 c						0.06 J	
Cadmium	0.98	37	39 n	1,000 n						0.21 J	
Calcium	25295	ND	1000000	1000000	470 J	1080	1950	15500	2630	81200	2470
Chromium	5	290	390 n	10,000 n	1.1 J		0.61 J	1.2 J	0.48 J	4.5	1 J
Copper	4.1	ND	270,000 n	1,000,000 n	1.7 J	1.8 J	3.2 J	2.4 J	1.8 J	2.5 J	1.4 J
Iron	712	ND	23,000 n	610,000 n	314	125	114	241	81	577	202
Lead	14.5	500	400	400	7.7	5	4.4 J	4.4 J	5.7 J	4.1	5.3 J
Magnesium	328	ND	460,468	460,468					33.7 J	809 J	
Manganese	8.1	370	1,800 n	47,000 n	3.5	3.2	4.2	5.4	2.1 J	13	6.1
Mercury	0.07	23	23 n	610 n							0.03 J
Nickel	4.4	1500	1,600 n	41,000 n			0.49 J			0.95 J	0.48 J
Silver	ND	390	390 n	10,000 n							
Zinc	17.2	23000	23,000 n	610,000 n			561		32.7		

Appendix D
Table D-1. Summary of Positive Detections in Surface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30S00801 10/23/97	30S00901 10/23/97	30S00901D 10/23/97	30S01001 10/23/97	30S01101 10/23/97	30S01201 10/23/97
Sampling Date										
Volatile Organics, ug/kg										
2-Butanone		2,200,000	47,000,000 n	1,000,000,000 n						
Semivolatile Organics, ug/kg										
Acenaphthene						8 J				
Acenaphthylene		670,000	2,300,000 n	61,000,000 n	6 J	9 J	6 J	12 J	10 J	7 J
Anthracene		20000000	23,000,000 n	610000000 n						
Benzo(a)anthracene		1,400	880 c	7,800 c	8 J	15 J	12 J	22 J	24 J	24 J
Benzo(a)pyrene		100	88 c	780 c	10 J	22 J	14 J	41 J	38 J	34 J
Benzo(b)fluoranthene		1,400	880 c	7,800 c	20 J	39 J	28 J	71 J	63 J	55 J
Benzo(g,h,i)perylene		14,000	2300000 n	61,000,000 n	5 J	12 J	10 J	29 J	27 J	21 J
Benzo(k)fluoranthene		14,000	8,800 c	78,000 c		11 J	8 J	26 J	22 J	19 J
Butylbenzylphthalate		15,000,000	16,000,000 n	410,000,000 n						51 J
Chrysene		140,000	88,000 c	780,000 c	16 J	40 J	28 J	52 J	42 J	40 J
Di-n-butylphthalate		7,300,000	7,800,000 n	200,000,000 n			43 J			
Dibenzofuran		240,000	310,000 n	8,200,000 n						
Fluoranthene		2,900,000	3,100,000 n	82,000,000 n	14 J	53 J	35 J	41 J	41 J	44 J
Fluorene		2,400,000	3,100,000 n	82,000,000 n		8 J				
Indeno(1,2,3-cd)pyrene		1400	880 c	7,800 c		15 J		31 J	33 J	26 J
Naphthalene		1300000	3,100,000 n	82,000,000 n		15 J	8 J			
Phenanthrene		1,700,000	2,300,000 n	61,000,000 n	7 J	32 J	20 J	11 J	9 J	11 J
Pyrene		2,200,000	2,300,000 n	61,000,000 n	21 J	64 J	43 J	54 J	49 J	51 J
Pesticides/PCBs, ug/kg										
4,4'-DDD		4500	2,700 c	24,000 c				24 J		
4,4'-DDE		3000	1,900 c	17,000 c	2.3 J	8.2	7.6	36 J		1.4 J
4,4'-DDT		3100	1,900 c	17,000 c	2.2 J	11 J	13 J	520 DJ	0.66 J	1.7 J
Aldrin		60	38 c	340 c		0.05 J	0.06 J	0.35 J		
alpha-Chlordane		800	490 c	4,400 c	0.14 J	17	16	1.9		0.28 J
Aroclor-1260		900	ND	ND						
beta-BHC		600	350 c	3,200 c	0.09 J	0.22 J	0.24 J	0.12 J		0.32 J
delta-BHC		23000	350 c	3,200 c			0.12 J			
Dieldrin		70	40 c	360 c					0.13 J	0.2 J
Endosulfan sulfate		ND	ND	ND				3.7 J		1.2 J

Appendix D
Table D-1. Summary of Positive Detections in Surface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30S00801	30S00901	30S00901D	30S01001	30S01101	30S01201
Sampling Date					10/23/97	10/23/97	10/23/97	10/23/97	10/23/97	10/23/97
Endrin		23000	23,000 n	610,000 n						
Endrin ketone		ND	ND	ND	0.19 J	0.58 J	0.24 J	1.2 J	0.54 J	0.69 J
gamma-BHC (Lindane)		800	490 c	4,400 c					0.03 J	0.13 J
gamma-Chlordane		800	490 c	4,400 c	0.16 J	9.5 J	9.7	1.2 J	0.14 J	0.2 J
Heptachlor		200	140 c	1,300 c	0.09 J	0.2 J	0.2 J	0.14 J		
Heptachlor epoxide		100	70 c	630 c		0.64 J	0.59 J			
Methoxychlor		380000	390,000 n	10,000,000 n				6.4 J		
Herbicides, ug/kg										
2,4-DB		610,000	630,000 n	16,000,000 n					3.7 J	7.5 J
MCPP		77,000	78,000 n	2,000,000 n				1300 J		
Inorganics, mg/kg										
Aluminum	2088	75000	78,000 n	1,000,000 n	861	171	224	421	214	1040
Arsenic	1.0	0.8	0.43 /23 c/n	3.8 c/610 c/n						
Barium	8.7	5,200.0	5,500 n	140,000 n	8.2 J	5.9 J	5.4 J	10.1 J	5.5 J	10.9 J
Beryllium	ND	0.2	0.15 c	1 c						
Cadmium	0.98	37	39 n	1,000 n						0.2 J
Calcium	25295	ND	1000000	1000000	830 J	529 J		4830	11900	12100
Chromium	5	290	390 n	10,000 n	1.7 J	0.76 J	0.81 J	1.2 J	1.3 J	2.5
Copper	4.1	ND	270,000 n	1,000,000 n	1.6 J	1.2 J	1.3 J	1.6 J	3.2 J	4.8 J
Iron	712	ND	23,000 n	610,000 n	83.8	190	200	131	136	255
Lead	14.5	500	400	400	6.2 J	24 J	24.8 J	51 J	3.4 J	11.1 J
Magnesium	328	ND	460,468	460,468						
Manganese	8.1	370	1,800 n	47,000 n	2.2 J	7	8.3	4	4.7	7.3
Mercury	0.07	23	23 n	610 n	0.08			0.03 J		0.04 J
Nickel	4.4	1500	1,600 n	41,000 n				0.59 J		0.75 J
Silver	ND	390	390 n	10,000 n	2.6					
Zinc	17.2	23000	23,000 n	610,000 n		25.2	24	14		13.9

Appendix D
Table D-1. Notes for Summary of Positive Detections in
Surface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

NOTES:

¹ The background screening value is twice the average of detected concentrations for inorganic analytes.

² SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995). Arsenic value is as revised in Applicability of Soil Cleanup Goals for Florida (FDEP memorandum, January 19, 1996). Values indicated are from a residential scenario.
Chromium values are for Chromium VI.

³ RBC = Risk-Based Concentration Table, USEPA Region III, May 1996, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, magnesium, potassium, sodium) screening values were derived based on recommended daily allowances (RDAs).
RBC for benzo(g,h,i)perylene and phenanthrene are not available, value is based on pyrene.

n = noncarcinogenic pathway

c = carcinogenic pathway

mg/kg = milligrams per kilogram.

ND = Not determined.

ug/kg = micrograms per kilogram.

bls = below land surface

PCB = polychlorinated biphenyl.

OSWER = Office of Solid Waste and Emergency Response.

USEPA = U.S. Environmental Protection Agency.

DDD = Dichlorodiphenyldichloroethane

DDE = Dichlorodiphenyldichloroethene

DDT = Dichlorodiphenyltrichloroethane

D = Indicates value was determined during a diluted reanalysis.

J = Reported concentration is an estimated quantity.

All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

Bold/shaded values indicate exceedance of regulatory guidance and background.

TABLE D-2

SUMMARY OF POSITIVE DETECTIONS IN SUBSURFACE SOIL

Appendix D
Table D-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID Sampling Date	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30B00101 10/23/97	30B00101D 10/23/97	30B00201 10/30/97	30B00301 10/31/97	30B00301D 10/31/97
Semivolatile Organics, ug/kg									
Acenaphthylene		NA	2,300,000 n	61,000,000 n					
Benzo(a)anthracene		NA	880 c	7,800 c		12 J			
Benzo(a)pyrene		NA	88 c	780 c		20 J			
Benzo(b)fluoranthene		NA	880 c	7,800 c		19 J			
Benzo(g,h,i)perylene		NA	2300000 n	61,000,000 n					
Benzo(k)fluoranthene		NA	8,800 c	78,000 c		27 J			
bis(2-Ethylhexyl)phthalate		NA	46,000 c	410,000 c		210 J			
Chrysene		NA	88,000 c	780,000 c		33 J			
Di-n-butylphthalate		NA	7,800,000 n	200,000,000 n					
Fluoranthene		NA	3,100,000 n	82,000,000 n		41 J	8 J		
Indeno(1,2,3-cd)pyrene		NA	880 c	7,800 c					
Phenanthrene		NA	2,300,000 n	61,000,000 n		20 J			
Pyrene		NA	2,300,000 n	61,000,000 n		57 J			
Pesticides/PCBs, ug/kg									
4,4'-DDD		NA	2,700 c	24,000 c					
4,4'-DDE		NA	1,900 c	17,000 c					
4,4'-DDT		NA	1,900 c	17,000 c	0.34 J	0.15 J			0.54 J
Aldrin		NA	38 c	340 c				0.09 J	0.05 J
alpha-Chlordane		NA	490 c	4,400 c					0.07 J
beta-BHC		NA	350 c	3,200 c		0.18 J			
delta-BHC		NA	350 c	3,200 c				0.1 J	
Dieldrin		NA	40 c	360 c				2.3 J	2.7 J
Endosulfan sulfate		NA	ND	ND					
Endrin ketone		NA	ND	ND			0.18 J	0.95 J	
gamma-BHC (Lindane)		NA	490 c	4,400 c					
gamma-Chlordane		NA	490 c	4,400 c					0.11 J
Heptachlor		NA	140 c	1,300 c		0.11 J			0.07 J
Heptachlor epoxide		NA	70 c	630 c					
Methoxychlor		NA	390,000 n	10,000,000 n					0.48 J
Herbicides, ug/kg									
2,4,5-T		NA	780,000 n	20,000,000 n					
Inorganics, mg/kg									

Appendix D
Table D-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30B00101	30B00101D	30B00201	30B00301	30B00301D
Sampling Date					10/23/97	10/23/97	10/30/97	10/31/97	10/31/97
Aluminum	2,119	NA	78,000 n	1,000,000 n	105	112	415 J	224 J	247 J
Arsenic	1.1	NA	0.43 /23 c/n	3.8 c/610 c/n			1.5 J		2.3 J
Barium	3.6	NA	5,500 n	140,000 n					
Calcium	115	NA	1000000	1000000	654 J	1120 J	83.3 J	2940 J	1140 J
Chromium	4	NA	390 n	10,000 n	0.56 J	0.69 J	2.5	1.8 J	2.3 J
Cobalt	2	NA	4,700 n	120,000 n			0.89 J	0.3 J	1 J
Copper	ND	NA	270,000 n	1,000,000 n	0.65 J		0.63 J		
Iron	264	NA	23,000 n	610,000 n	17.6 J	12.2 J	16.9 J	25.1 J	22.4 J
Lead	3.9	NA	400	400	0.59 J	1 J	0.74 J	0.58 J	0.53 J
Magnesium	32.8	NA	460,468	460,468	20.7 J			25 J	19.4 J
Manganese	2.1	NA	1,800 n	47,000 n			0.44 J		
Mercury	ND	NA	23 n	610 n					
Selenium	1.3	NA	390 n	10,000 n			0.79 J		1.3 J
Silver	ND	NA	390 n	10,000 n			1.1 J		1.5 J
Thallium	ND	NA	ND	ND					
Vanadium	3.4	NA	550 n	14,000 n			0.5 J		
Zinc	5.6	NA	23,000 n	610,000 n	0.9 J				
General Chemistry, mg/kg									
TRPH	ND	ND	ND	ND			13	28	

Appendix D
Table D-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30B00401	30B00501	30B00601	30B00701
Sampling Date					10/30/97	10/24/97	10/24/97	10/24/97
Semivolatile Organics, ug/kg								
Acenaphthylene		NA	2,300,000 n	61,000,000 n			7 J	
Benzo(a)anthracene		NA	880 c	7,800 c			20 J	
Benzo(a)pyrene		NA	88 c	780 c			22 J	
Benzo(b)fluoranthene		NA	880 c	7,800 c			40 J	
Benzo(g,h,i)perylene		NA	2300000 n	61,000,000 n			13 J	
Benzo(k)fluoranthene		NA	8,800 c	78,000 c			15 J	
bis(2-Ethylhexyl)phthalate		NA	46,000	410,000			150 J	
Chrysene		NA	88,000 c	780,000 c			32 J	
Di-n-butylphthalate		NA	7,800,000 n	200,000,000 n			42 J	
Fluoranthene		NA	3,100,000 n	82,000,000 n			36 J	
Indeno(1,2,3-cd)pyrene		NA	880 c	7,800 c			16 J	
Phenanthrene		NA	2,300,000 n	61,000,000 n			12 J	
Pyrene		NA	2,300,000 n	61,000,000 n			43 J	
Pesticides/PCBs, ug/kg								
4,4'-DDD		NA	2,700 c	24,000 c			6.3 J	
4,4'-DDE		NA	1,900 c	17,000 c			200 D	
4,4'-DDT		NA	1,900 c	17,000 c			270 DJ	
Aldrin		NA	38 c	340 c				
alpha-Chlordane		NA	490 c	4,400 c			27 D	
beta-BHC		NA	350 c	3,200 c			0.12 J	
delta-BHC		NA	350 c	3,200 c			0.05 J	
Dieldrin		NA	40 c	360 c				
Endosulfan sulfate		NA	ND	ND			7.8 J	
Endrin ketone		NA	ND	ND		0.49 J	1.4 J	0.36 J
gamma-BHC (Lindane)		NA	490 c	4,400 c			0.16 J	
gamma-Chlordane		NA	490 c	4,400 c			29 D	
Heptachlor		NA	140 c	1,300 c	0.09 J		0.44 J	
Heptachlor epoxide		NA	70 c	630 c			1.2 J	
Methoxychlor		NA	390,000 n	10,000,000 n				
Herbicides, ug/kg								
2,4,5-T		NA	780,000 n	20,000,000 n		0.4 J		
Inorganics, mg/kg								

Appendix D
Table D-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	Background Screening ¹	SCG for Residential Soil ²	RBC ³ for Residential Soil	RBC ³ for Industrial Soil	30B00401	30B00501	30B00601	30B00701
Sampling Date					10/30/97	10/24/97	10/24/97	10/24/97
Aluminum	2,119	NA	78,000 n	1,000,000 n	205 J		975	
Arsenic	1.1	NA	0.43 /23 c/n	3.8 c/610 c/n	1.5 J			
Barium	3.6	NA	5,500 n	140,000 n		0.91 J	10.5 J	
Calcium	115	NA	1000000	1000000	103 J	578 J	7770	1550
Chromium	4	NA	390 n	10,000 n	2.2 J		4	1.3 J
Cobalt	2	NA	4,700 n	120,000 n	0.73 J			
Copper	ND	NA	270,000 n	1,000,000 n	0.74 J		1.4 J	
Iron	264	NA	23,000 n	610,000 n	17.6 J		1390	13 J
Lead	3.9	NA	400	400	1.1 J	0.59 J	52.2 J	4.6 J
Magnesium	32.8	NA	460,468	460,468	11.1 J			
Manganese	2.1	NA	1,800 n	47,000 n			55.1	
Mercury	ND	NA	23 n	610 n	0.03 J		0.04 J	
Selenium	1.3	NA	390 n	10,000 n				
Silver	ND	NA	390 n	10,000 n	0.97 J			
Thallium	ND	NA	ND	ND	1.3 J			
Vanadium	3.4	NA	550 n	14,000 n				
Zinc	5.6	NA	23,000 n	610,000 n		0.2 J	71.3	
General Chemistry, mg/kg								
TRPH	ND	ND	ND	ND	13		45	

Appendix D
Table D-2. Summary of Positive Detections in Subsurface Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

NOTES:

¹ The background screening value is twice the average of detected concentrations for inorganic analytes.

² SCG = Soil Cleanup Goals for Florida (Florida Department of Environmental Protection memorandum, September 29, 1995).

For detected analytes and compounds in subsurface soils, SCGs are not applicable (NAs) because there are no associated exceedances of Florida groundwater guidance concentrations in site groundwater.

³ RBC = Risk-Based Concentration Table, USEPA Region III, March 1997, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites (OSWER directive 9355-4-12). For essential nutrients (calcium, potassium, sodium, magnesium) screening values were derived based on recommended daily allowances (RDAs).

n = noncarcinogenic pathway

c = carcinogenic pathway

NA = Not applicable (for SCGs) or not analyzed.

ND = Not determined.

mg/kg = milligrams per kilogram.

ug/kg = micrograms per kilogram.

OSWER = Office of Solid Waste and Emergency Response.

USEPA = U.S. Environmental Protection Agency.

J = Reported concentration is an estimated quantity.

All inorganics results expressed in milligrams per kilogram (mg/kg) soil dry weight; organics in micrograms per kilogram (ug/kg) soil dry weight.

TABLE D-3

SUMMARY OF POSITIVE DETECTIONS IN GROUNDWATER

Appendix D
Table D-3. Summary of Positive Detections in Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Well ID						OLD-30-01		OLD-30-02			
Sample ID	Background ¹ Screening	FDEPG	Primary FEDMCL	RBC ² for Tap Water		30G00101	30H00101	30G00201	30G00202	30H00201	30H00202
Sampling Date						11/12/97	11/12/97	11/12/97	2/11/98	11/12/97	2/11/98
Volatile Organics, ug/L											
Methylene chloride		5 p	5	4.1 c			NA		NA	NA	NA
Semivolatile Organics, ug/L											
Diethylphthalate		5600 st	ND	29,000 n		1 J	NA		NA	NA	NA
Pesticides/PCBs, ug/L											
4,4'-DDE		0.1 c	ND	0.2 c			NA	0.0016 J	NA	NA	NA
alpha-Chlordane		2 p	2	ND		0.0024 J	NA		NA	NA	NA
Dieldrin		0.1 c	ND	0.0042 c			NA		NA	NA	NA
Endrin ketone		ND	ND	ND			NA	0.0029 J	NA	NA	NA
gamma-BHC (Lindane)		ND	ND	0.052 c		0.0043 J	NA		NA	NA	NA
gamma-Chlordane		2 p	2	ND			NA		NA	NA	NA
Inorganics, ug/L											
Aluminum	4,067	200 s	ND	37,000 n		4130	516	451	125 B	276	59.5 B
Antimony	4.1	6 p	6	15 n						3.7 J	
Arsenic	5	50 p	50	0.045/11 c/n							4.3 B
Barium	31.4	2,000 p	2,000	2,600 n		26.1 J			17.1 B		17.7 B
Beryllium	ND	4 p	4	0.016 c							0.1 B
Calcium	36,830	ND	ND	1,000,000		2380 J	1930 J	41300	89400	40300	87300
Chromium	7.8	100	100	ND					0.9 B	392 J	
Cobalt	ND	ND	ND	2,200 n		1.2 J				7.1 J	1.8 B
Copper	5.4	1,000 s	1,300	1,500 n		8.3 J			2.4 B	7.2 J	11 B
Iron	1,227	300 s	ND	11,000 n		958	742 J		43 B	1740 J	29.4 B
Lead	4	15 p	15	15		6.3					
Magnesium	4,560	ND	ND	118,807		1430 J	1320 J	1660 J	4890 B	1630 J	4810 B
Manganese	17	50 s	ND	840 n					3.3 B	86.8 J	5.2 B
Mercury	0.12	2	2	11 n		0.22				0.15 J	
Nickel	ND	100	100	730 n						435 J	9.4 B
Potassium	5,400	ND	ND	297,016				3270 J	7600	3310 J	7770
Selenium		50 s	ND	180		2.7 J		2.6 J			5.3
Sodium	18,222	160,000 p	ND	396,022		3580 J	3730 J	7460	8470	8950	8560
Vanadium	20.6	49 st	ND	260 n					1.8 B		1.6 B
Zinc	4	5000 s	ND	11,000 n					2 B		20.9
General Chemistry, mg/L											
Suspended Solids	ND	ND	ND	ND		150			NA		NA

Appendix D
Table D-3. Summary of Positive Detections in Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Well ID						OLD-30-03					
Sample ID	Background ¹ Screening	FDEPG	Primary FEDMCL	RBC ² for Tap Water		30G00301	30G00302	30H00301	30H00302	30G00301D	30H00301D
Sampling Date						11/12/97	2/11/98	11/12/97	2/11/98	11/12/97	11/12/97
Volatile Organics, ug/L											
Methylene chloride		5 p	5	4.1 c			NA	NA	NA	8 J	NA
Semivolatile Organics, ug/L											
Diethylphthalate		5600 st	ND	29,000 n			NA	NA	NA		NA
Pesticides/PCBs, ug/L											
4,4'-DDE		0.1 c	ND	0.2 c			NA	NA	NA		NA
alpha-Chlordane		2 p	2	ND			NA	NA	NA		NA
Dieldrin		0.1 c	ND	0.0042 c		0.011 J	NA	NA	NA	0.01 J	NA
Endrin ketone		ND	ND	ND		0.0028 J	NA	NA	NA		NA
gamma-BHC (Lindane)		ND	ND	0.052 c			NA	NA	NA		NA
gamma-Chlordane		2 p	2	ND			NA	NA	NA		NA
Inorganics, ug/L											
Aluminum	4,067	200 s	ND	37,000 n		1120	370	739	64.2 B	1130	714
Antimony	4.1	6 p	6	15 n		3.8 J		3.5 J			
Arsenic	5	50 p	50	0.045/11 c/n					5.2 B		
Barium	31.4	2,000 p	2,000	2,600 n			3.1 B		2.8 B		
Beryllium	ND	4 p	4	0.016 c			0.11 B				
Calcium	36,830	ND	ND	1,000,000		62900	61800	60600	62100	63100	59600
Chromium	7.8	100	100	ND		113 J		51.7 J			
Cobalt	ND	ND	ND	2,200 n		3.5 J	2.2 B	2 J	1.4 B		1.1 J
Copper	5.4	1,000 s	1,300	1,500 n		5.2 J	2.5 B	3.8 J	4.2 B	2.5 J	2.8 J
Iron	1,227	300 s	ND	11,000 n		597 J	180	361 J	124		337 J
Lead	4	15 p	15	15							
Magnesium	4,560	ND	ND	118,807		2140 J	2250 B	2170 J	2290 B	2140 J	2140 J
Manganese	17	50 s	ND	840 n		34.1 J	2.7 B	19.4 J	3.3 B		
Mercury	0.12	2	2	11 n							
Nickel	ND	100	100	730 n		15.1 J		85.6 J	3.8 B		
Potassium	5,400	ND	ND	297,016		12400	5250	11600	5340	12800	11300
Selenium		50 s	ND	180			4.1 B				
Sodium	18,222	160,000 p	ND	396,022		11100	8360	11700	8430	11000	11600
Vanadium	20.6	49 st	ND	260 n		7.9 J					
Zinc	4	5000 s	ND	11,000 n			6.2 B		9.8 B		
General Chemistry, mg/L											
Suspended Solids	ND	ND	ND	ND		7	NA		NA	6	

Appendix D
Table D-3. Summary of Positive Detections in Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Well ID						OLD-30-04		OLD-30-05		OLD-30-06	
Sample ID	Background ¹ Screening	FDEPG	Primary FEDMCL	RBC ² for Tap Water		30G00401	30H00401	30G00501	30H00501	30G00601	30H00601
Sampling Date						11/11/97	11/11/97	11/13/97	11/13/97	11/13/97	11/13/97
Volatile Organics, ug/L											
Methylene chloride		5 p	5	4.1 c			NA		NA		NA
Semivolatile Organics, ug/L											
Diethylphthalate		5600 st	ND	29,000 n			NA		NA		NA
Pesticides/PCBs, ug/L											
4,4'-DDE		0.1 c	ND	0.2 c	0.0016 J	NA			NA		NA
alpha-Chlordane		2 p	2	ND	0.0022 J	NA		0.0015 J	NA		NA
Dieldrin		0.1 c	ND	0.0042 c		NA			NA		NA
Endrin ketone		ND	ND	ND		NA		0.0043 J	NA		NA
gamma-BHC (Lindane)		ND	ND	0.052 c		NA			NA	0.0065 J	NA
gamma-Chlordane		2 p	2	ND	0.0055 J	NA			NA	0.0029 J	NA
Inorganics, ug/L											
Aluminum	4,067	200 s	ND	37,000 n	443	117 J	350	71.8 J	1930	376	
Antimony	4.1	6 p	6	15 n		3.8 J					
Arsenic	5	50 p	50	0.045/11 c/n							
Barium	31.4	2,000 p	2,000	2,600 n						34.6 J	
Beryllium	ND	4 p	4	0.016 c							
Calcium	36,830	ND	ND	1,000,000	57900	56300	38000	38700	20800	18600	
Chromium	7.8	100	100	ND							
Cobalt	ND	ND	ND	2,200 n						1.9 J	
Copper	5.4	1,000 s	1,300	1,500 n	2.7 J		3.6 J	2.6 J	6.9 J	2.2 J	
Iron	1,227	300 s	ND	11,000 n						133	
Lead	4	15 p	15	15			1.6 J			7.7	1.5 J
Magnesium	4,560	ND	ND	118,807	2640 J	2620 J	1720 J	1750 J	2620 J	2370 J	
Manganese	17	50 s	ND	840 n							
Mercury	0.12	2	2	11 n							
Nickel	ND	100	100	730 n						48.6	
Potassium	5,400	ND	ND	297,016	7730	7480	970 J	916 J	3620 J	3390 J	
Selenium		50 s	ND	180	4.4 J	3.1 J					
Sodium	18,222	160,000 p	ND	396,022	8150	8180	11500	12400	9560	9380	
Vanadium	20.6	49 st	ND	260 n							
Zinc	4	5000 s	ND	11,000 n			55.8			30.3	
General Chemistry, mg/L											
Suspended Solids	ND	ND	ND	ND						5	

Naval Training Center, Orlando
Orlando, FL

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Appendix D
Table D-3. Notes for Summary of Positive Detections in
Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

NOTES:

A full independent data validation is pending for groundwater analytical results.

¹ Groundwater background screening value is twice the average of detected concentrations for inorganic analytes.

² RBC = Risk-Based Concentration Table, USEPA Region III, May 1996, R.L. Smith. RBC for chromium is based on chromium VI. RBC for lead is not available, value is treatment technology action limit for lead in drinking water distribution system identified in Drinking Water Standards and Health Advisories (USEPA, 1995). For essential nutrients (calcium, magnesium, potassium, and sodium) screening values were derived based on recommended daily allowances (RDAs). Value for copper is a treatment level.

p = Primary Standard

s = Secondary Standard.

st = Systemic Toxicant

n = noncarcinogenic effects.

c = carcinogenic effects.

NA = Not analyzed.

ND = Not determined.

USEPA = U.S. Environmental Protection Agency.

FDEPG = Florida Department of Environmental Protection, Groundwater Guidance Concentrations, June 1994.

FEDMCL = Federal Maximum Contaminant Levels, Primary Drinking Water Regulations and Health Advisories, February 1996.

B = Reported concentration is between the instrument detection limit (IDL) and the contract required detection limit (CRDL).

The "B" qualifier typically changes to "J" (estimated concentration) upon data validation.

Groundwater resampled on 2/11/98 has not been subjected to full independent data validation.

H = Filtered sample (0.45 micron in-line filter).

J = Reported concentration is an estimated quantity.

ug/l = micrograms per liter.

mg/l = milligrams per liter.

Bold/shaded numbers indicate exceedance of groundwater guidance and background.

Blank space indicates analyte/compound was not detected at the reporting limit.

APPENDIX E

SUMMARY OF ANALYTICAL RESULTS

Table E-1

Summary of Soil Analytical Results

Table E-2

Summary of Groundwater Analytical Results

TABLE E-1

SUMMARY OF SOIL ANALYTICAL RESULTS

Appendix E
Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701	30S00801	30S00901	30S00901D
Lab ID	S776068*1	S776068*2	S776068*3	S776068*4	S776068*5	S776068*7	S776068*8	S776068*9	S776068*10	S776068*11
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
Volatile organics, ug/kg										
1,1,1-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1,2-Trichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2-Dichloropropane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone	10 U	10 U	10 U	10 U	10 U	10 U	22	10 U	10 U	10 U
2-Hexanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromoform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Bromomethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon tetrachloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Tetrachloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Trichloroethene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Semivolatile organics, ug/kg										
1,2,4-Trichlorobenzene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U

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Table E-1. Summary of Soil Analytical Results
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Sample ID	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701	30S00801	30S00901	30S00901D
Lab ID	S776068*1	S776068*2	S776068*3	S776068*4	S776068*5	S776068*7	S776068*8	S776068*9	S776068*10	S776068*11
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
1,2-Dichlorobenzene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
1,3-Dichlorobenzene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
1,4-Dichlorobenzene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2,2'-oxybis(1-Chloropropane)	330 UJ	340 UJ	350 UJ	340 UJ	330 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ
2,4,5-Trichlorophenol	840 U	850 U	870 U	850 U	840 U	860 U	850 U	850 U	850 U	850 U
2,4,6-Trichlorophenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2,4-Dichlorophenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2,4-Dimethylphenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2,4-Dinitrophenol	840 UJ	850 UJ	870 UJ	850 UJ	840 UJ	860 UJ	850 UJ	850 UJ	850 UJ	850 UJ
2,4-Dinitrotoluene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2,6-Dinitrotoluene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2-Chloronaphthalene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2-Chlorophenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2-Methylnaphthalene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2-Methylphenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
2-Nitroaniline	840 U	850 U	870 U	850 U	840 U	860 U	850 U	850 U	850 U	850 U
2-Nitrophenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
3,3'-Dichlorobenzidine	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
3-Methylphenol/4-Methylphenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
3-Nitroaniline	840 U	850 U	870 U	850 U	840 U	860 U	850 U	850 U	850 U	850 U
4,6-Dinitro-2-methylphenol	840 UJ	850 UJ	870 UJ	850 UJ	840 UJ	860 UJ	850 UJ	850 UJ	850 UJ	850 UJ
4-Bromophenyl-phenylether	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
4-Chloro-3-methylphenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
4-Chloroaniline	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
4-Chlorophenyl-phenylether	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
4-Nitroaniline	840 U	850 U	870 U	850 U	840 U	860 U	850 U	850 U	850 U	850 UJ
4-Nitrophenol	840 UJ	850 UJ	870 UJ	850 UJ	840 UJ	860 UJ	850 UJ	850 UJ	850 UJ	850 UJ
Acenaphthene	330 U	340 U	350 U	340 U	330 U	340 U	14 J	340 U	8 J	340 UJ
Acenaphthylene	330 U	340 U	350 U	340 U	330 U	12 J	16 J	6 J	9 J	6 J
Anthracene	15 J	340 U	350 U	340 U	330 U	340 U	12 J	340 U	340 U	340 U
Benzo(a)anthracene	130 J	340 U	350 U	8 J	330 U	15 J	32 J	8 J	15 J	12 J
Benzo(a)pyrene	140 J	340 U	11 J	10 J	7 J	38 J	44 J	10 J	22 J	14 J
Benzo(b)fluoranthene	270 J	12 J	13 J	16 J	13 J	55 J	84 J	20 J	39 J	28 J
Benzo(g,h,i)perylene	56 J	340 UJ	350 UJ	5 J	330 UJ	13 J	28 J	5 J	12 J	10 J
Benzo(k)fluoranthene	110 J	340 U	350 U	7 J	330 U	340 U	35 J	340 U	11 J	8 J
bis(2-Chloroethoxy)methane	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U

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Sample ID	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701	30S00801	30S00901	30S00901D
Lab ID	S776068*1	S776068*2	S776068*3	S776068*4	S776068*5	S776068*7	S776068*8	S776068*9	S776068*10	S776068*11
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
bis(2-Chloroethyl)ether	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
bis(2-Ethylhexyl)phthalate	330 UJ	340 UJ	350 UJ	340 UJ	330 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ
Butylbenzylphthalate	330 U	58 J	73 J	340 U	69 J	340 U	54 J	340 U	340 U	340 UJ
Carbazole	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Chrysene	100 J	7 J	350 U	10 J	8 J	16 J	39 J	16 J	40 J	28 J
Di-n-butylphthalate	330 UJ	340 UJ	350 UJ	340 UJ	330 UJ	340 UJ	340 UJ	340 UJ	340 UJ	43 J
Di-n-octylphthalate	330 UJ	340 UJ	350 UJ	340 UJ	330 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 UJ
Dibenz(a,h)anthracene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Dibenzofuran	330 U	340 U	350 U	340 U	330 U	340 U	16 J	340 U	340 U	340 U
Diethylphthalate	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Dimethylphthalate	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Fluoranthene	100 J	11 J	6 J	12 J	12 J	17 J	42 J	14 J	53 J	35 J
Fluorene	330 U	340 U	350 U	340 U	330 U	340 U	16 J	340 U	8 J	340 UJ
Hexachlorobenzene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Hexachlorobutadiene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Hexachlorocyclopentadiene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Hexachloroethane	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Indeno(1,2,3-cd)pyrene	79 J	340 U	350 U	340 U	330 U	21 J	38 J	340 U	15 J	340 U
Isophorone	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
N-Nitroso-di-n-propylamine	330 UJ	340 UJ	350 UJ	340 UJ	330 UJ	340 UJ	340 UJ	340 UJ	340 UJ	340 U
N-Nitrosodiphenylamine	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Naphthalene	330 U	340 U	350 U	340 U	330 U	340 U	42 J	340 U	15 J	8 J
Nitrobenzene	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Pentachlorophenol	840 UJ	850 UJ	870 UJ	850 UJ	840 UJ	860 UJ	850 UJ	850 UJ	850 UJ	850 UJ
Phenanthrene	330 U	340 U	350 U	340 U	330 U	340 U	31 J	7 J	32 J	20 J
Phenol	330 U	340 U	350 U	340 U	330 U	340 U	340 U	340 U	340 U	340 U
Pyrene	140 J	12 J	350 U	15 J	12 J	34 J	53 J	21 J	64 J	43 J
Pesticides/PCBs, ug/kg										
4,4'-DDD	3.3 U	3.4 U	3.5 U	3.4 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
4,4'-DDE	3.3 U	3.4 U	3.5 U	3.4 U	3.3 U	3.4 U	3.4 U	2.3 J	8.2	7.6
4,4'-DDT	0.2 J	3.4 U	3.5 U	3.4 U	3.3 U	3.4 U	0.74 J	2.2 J	11 J	13 J
Aldrin	1.7 U	1.7 U	0.09 J	1.7 U	1.7 U	0.57 J	0.23 J	1.7 U	0.05 J	0.06 J
alpha-BHC	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
alpha-Chlordane	0.1 J	1.2 J	0.06 J	0.12 J	1.7 U	18	1.7 U	0.14 J	17	16
Aroclor-1016	33 U	34 U	35 U	34 U	33 U	34 U	34 U	34 U	34 U	34 U
Aroclor-1221	68 U	68 U	70 U	68 U	68 U	69 U	68 U	68 U	68 U	68 U

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Table E-1. Summary of Soil Analytical Results
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Sample ID	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701	30S00801	30S00901	30S00901D
Lab ID	S776068*1	S776068*2	S776068*3	S776068*4	S776068*5	S776068*7	S776068*8	S776068*9	S776068*10	S776068*11
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
Aroclor-1232	33 U	34 U	35 U	34 U	33 U	34 U	34 U	34 U	34 U	34 U
Aroclor-1242	33 U	34 U	35 U	34 U	33 U	34 U	34 U	34 U	34 U	34 U
Aroclor-1248	33 U	34 U	35 U	34 U	33 U	34 U	34 U	34 U	34 U	34 U
Aroclor-1254	33 U	34 U	35 U	34 U	33 U	34 U	34 U	34 U	34 U	34 U
Aroclor-1260	33 U	34 U	35 U	46	33 U	34 U	34 U	34 U	34 U	34 U
beta-BHC	1.7 U	1.7 U	1.8 U	0.1 J	1.7 U	0.21 J	0.4 J	0.09 J	0.22 J	0.24 J
delta-BHC	1.7 U	1.7 U	1.8 U	0.07 J	0.11 J	1.8 U	1.7 U	1.7 U	1.7 U	0.12 J
Dieldrin	0.26 J	0.15 J	2.1 J	0.82 J	1.9 J	3.9 J	0.24 J	3.4 U	3.4 U	3.4 U
Endosulfan I	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
Endosulfan II	3.3 U	3.4 U	3.5 U	3.4 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Endosulfan sulfate	3.3 U	3.4 U	3.5 U	3.8 J	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Endrin	3.3 U	3.4 U	3.5 U	3.4 U	3.3 U	0.93 J	3.4 U	3.4 U	3.4 U	3.4 U
Endrin aldehyde	3.3 U	3.4 U	3.5 U	3.4 U	3.3 U	3.4 U	3.4 U	3.4 U	3.4 U	3.4 U
Endrin ketone	0.87 J	3.4 U	3.5 U	3.4 U	3.3 U	1.2 J	0.26 J	0.19 J	0.58 J	0.24 J
gamma-BHC (Lindane)	0.4 J	0.08 J	1.8 U	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U
gamma-Chlordane	0.47 J	0.78 J	0.13 J	0.36 J	0.07 J	10 J	0.21 J	0.16 J	9.5 J	9.7
Heptachlor	0.06 J	1.7 U	0.06 J	1.7 U	1.7 U	1.8 U	1.7 U	0.09 J	0.2 J	0.2 J
Heptachlor epoxide	1.7 U	1.7 U	1.8 U	1.7 U	1.7 U	1.4 J	1.7 U	1.7 U	0.64 J	0.59 J
Methoxychlor	8.4 J	17 U	18 U	17 U	17 U	19 J	17 U	17 U	17 U	17 U
Toxaphene	170 U	170 U	180 U	170 U	170 U	180 U	170 U	170 U	170 U	170 U
Herbicides, ug/kg										
2,4,5-T	NA	NA	NA	NA	NA	8.6 U	8.5 UJ	8.5 UJ	8.5 U	8.5 U
2,4,5-TP Silvex	NA	NA	NA	NA	NA	8.6 U	8.5 UJ	8.5 UJ	8.5 U	8.5 U
2,4-D	NA	NA	NA	NA	NA	8.6 U	8.5 UJ	8.5 UJ	8.5 U	8.5 U
2,4-DB	NA	NA	NA	NA	NA	8.6 U	8.5 U	8.5 U	8.5 U	8.5 U
Dalapon	NA	NA	NA	NA	NA	2100 U	2000 UJ	2000 UJ	2000 U	2000 U
Dicamba	NA	NA	NA	NA	NA	21 U	20 UJ	20 UJ	20 UJ	20 UJ
Dichloroprop	NA	NA	NA	NA	NA	100 U	100 U	100 U	100 U	100 U
Dinoseb	NA	NA	NA	NA	NA	100 U	100 UJ	100 UJ	100 UJ	100 UJ
MCPA	NA	NA	NA	NA	NA	2100 U	2000 U	2000 U	2000 U	2000 U
MCPP	NA	NA	NA	NA	NA	2100 U	2000 U	2000 U	2000 U	2000 U
Inorganics, mg/kg										
Aluminum	815	126	267	317	106	907	321	861	171	224
Antimony	0.67 U	0.67 U	0.69 U	0.67 U	0.67 U	0.68 U	0.67 U	0.67 U	0.67 U	0.67 U
Arsenic	0.73 U	0.73 U	0.76 U	0.73 U	0.73 U	0.91 J	0.73 U	0.73 U	0.73 U	0.73 U
Barium	13.3 J	2.2 J	2.8 J	3.9 J	2.4 J	5.9 J	5.1 J	8.2 J	5.9 J	5.4 J

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Sample ID	30S00101	30S00201	30S00301	30S00401	30S00501	30S00601	30S00701	30S00801	30S00901	30S00901D
Lab ID	S776068*1	S776068*2	S776068*3	S776068*4	S776068*5	S776068*7	S776068*8	S776068*9	S776068*10	S776068*11
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
Beryllium	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.06 J	0.04 U	0.04 U	0.04 U	0.04 U
Cadmium	0.12 U	0.12 U	0.13 U	0.12 U	0.12 U	0.21 J	0.12 U	0.12 U	0.12 U	0.12 U
Calcium	470 J	1080	1950	15500	2630	81200	2470	830 J	529 J	500 U
Chromium	1.1 J	0.41 U	0.61 J	1.2 J	0.48 J	4.5	1 J	1.7 J	0.76 J	0.81 J
Cobalt	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U
Copper	1.7 J	1.8 J	3.2 J	2.4 J	1.8 J	2.5 J	1.4 J	1.6 J	1.2 J	1.3 J
Iron	314	125	114	241	81	577	202	83.8	190	200
Lead	7.7	5	4.4 J	4.4 J	5.7 J	4.1	5.3 J	6.2 J	24 J	24.8 J
Magnesium	14.3 U	22.2 U	33.7 U	182 U	33.7 J	809 J	60.4 U	23.4 U	32.4 U	45.5 U
Manganese	3.5	3.2	4.2	5.4	2.1 J	13	6.1	2.2 J	7	8.3
Mercury	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U	0.02 U	0.03 J	0.08	0.02 U	0.02 U
Nickel	0.46 U	0.47 U	0.49 J	0.47 U	0.46 U	0.95 J	0.48 J	0.47 U	0.47 U	0.47 U
Potassium	37.3 U	27.7 U	25.6 U	26.9 U	22.1 U	47 U	36.6 U	24.1 U	24.9 U	22.9 U
Selenium	0.53 U	0.53 U	0.55 U	0.53 U	0.53 U	0.54 U	0.53 U	0.64 U	0.53 U	0.53 U
Silver	0.61 U	0.61 U	0.63 U	0.61 U	0.61 U	0.62 U	0.61 U	2.6	0.61 U	0.61 U
Sodium	63.3 UJ	66.5 UJ	56.6 UJ	34.8 UJ	53.9 UJ	81.8 UJ	50.4 UJ	59.6 UJ	52.7 UJ	32.2 UJ
Thallium	0.95 U	0.96 U	0.99 U	0.96 U	0.95 U	0.97 U	0.96 U	0.96 U	0.96 U	0.96 U
Vanadium	1 U	0.38 U	0.66 U	1.3 U	0.52 U	3.9 U	0.8 U	0.9 U	1.3 U	1.2 U
Zinc	4.2 U	8.1 U	561	9.4 U	32.7	5.5 U	6.8 U	9.8 U	25.2	24

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Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
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Sample ID	30S01001		30S01101		30S01201	
Lab ID	S776068*12	S776068*12*D	S776068*13	S776068*14		
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97		
Volatile organics, ug/kg						
1,1,1-Trichloroethane	10 U	NA	10 U	11 U		
1,1,2,2-Tetrachloroethane	10 U	NA	10 U	11 U		
1,1,2-Trichloroethane	10 U	NA	10 U	11 U		
1,1-Dichloroethane	10 U	NA	10 U	11 U		
1,1-Dichloroethene	10 U	NA	10 U	11 U		
1,2-Dichloroethane	10 U	NA	10 U	11 U		
1,2-Dichloroethene (total)	10 U	NA	10 U	11 U		
1,2-Dichloropropane	10 U	NA	10 U	11 U		
2-Butanone	10 U	NA	10 U	11 U		
2-Hexanone	10 U	NA	10 U	11 U		
4-Methyl-2-pentanone	10 U	NA	10 U	11 U		
Acetone	10 UJ	NA	10 UJ	11 UJ		
Benzene	10 U	NA	10 U	11 U		
Bromodichloromethane	10 U	NA	10 U	11 U		
Bromoform	10 U	NA	10 U	11 U		
Bromomethane	10 U	NA	10 U	11 U		
Carbon disulfide	10 U	NA	10 U	11 U		
Carbon tetrachloride	10 U	NA	10 U	11 U		
Chlorobenzene	10 U	NA	10 U	11 U		
Chloroethane	10 U	NA	10 U	11 U		
Chloroform	10 U	NA	10 U	11 U		
Chloromethane	10 U	NA	10 U	11 U		
cis-1,3-Dichloropropene	10 U	NA	10 U	11 U		
Dibromochloromethane	10 U	NA	10 U	11 U		
Ethylbenzene	10 U	NA	10 U	11 U		
Methylene chloride	10 U	NA	10 U	11 U		
Styrene	10 U	NA	10 U	11 U		
Tetrachloroethene	10 U	NA	10 U	11 U		
Toluene	10 U	NA	10 U	11 U		
trans-1,3-Dichloropropene	10 U	NA	10 U	11 U		
Trichloroethene	10 U	NA	10 U	11 U		
Vinyl chloride	10 U	NA	10 U	11 U		
Xylene (total)	10 U	NA	10 U	11 U		
Semivolatile organics, ug/kg						
1,2,4-Trichlorobenzene	340 U	NA	340 U	350 U		

Appendix E
Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30S01001		30S01101	30S01201
Lab ID	S776068*12	S776068*12*D	S776068*13	S776068*14
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
1,2-Dichlorobenzene	340 U	NA	340 U	350 U
1,3-Dichlorobenzene	340 U	NA	340 U	350 U
1,4-Dichlorobenzene	340 U	NA	340 U	350 U
2,2'-oxybis(1-Chloropropane)	340 UJ	NA	340 UJ	350 UJ
2,4,5-Trichlorophenol	860 U	NA	860 U	880 U
2,4,6-Trichlorophenol	340 U	NA	340 U	350 U
2,4-Dichlorophenol	340 U	NA	340 U	350 U
2,4-Dimethylphenol	340 U	NA	340 U	350 U
2,4-Dinitrophenol	860 UJ	NA	860 UJ	880 UJ
2,4-Dinitrotoluene	340 U	NA	340 U	350 U
2,6-Dinitrotoluene	340 U	NA	340 U	350 U
2-Chloronaphthalene	340 U	NA	340 U	350 U
2-Chlorophenol	340 U	NA	340 U	350 U
2-Methylnaphthalene	340 U	NA	340 U	350 U
2-Methylphenol	340 U	NA	340 U	350 U
2-Nitroaniline	860 U	NA	860 U	880 U
2-Nitrophenol	340 U	NA	340 U	350 U
3,3'-Dichlorobenzidine	340 U	NA	340 U	350 U
3-Methylphenol/4-Methylphenol	340 U	NA	340 U	350 U
3-Nitroaniline	860 U	NA	860 U	880 U
4,6-Dinitro-2-methylphenol	860 UJ	NA	860 UJ	880 UJ
4-Bromophenyl-phenylether	340 U	NA	340 U	350 U
4-Chloro-3-methylphenol	340 U	NA	340 U	350 U
4-Chloroaniline	340 U	NA	340 U	350 U
4-Chlorophenyl-phenylether	340 U	NA	340 U	350 U
4-Nitroaniline	860 UJ	NA	860 UJ	880 UJ
4-Nitrophenol	860 UJ	NA	860 UJ	880 UJ
Acenaphthene	340 U	NA	340 U	350 U
Acenaphthylene	12 J	NA	10 J	7 J
Anthracene	340 U	NA	340 U	350 U
Benzo(a)anthracene	22 J	NA	24 J	24 J
Benzo(a)pyrene	41 J	NA	38 J	34 J
Benzo(b)fluoranthene	71 J	NA	63 J	55 J
Benzo(g,h,i)perylene	29 J	NA	27 J	21 J
Benzo(k)fluoranthene	26 J	NA	22 J	19 J
bis(2-Chloroethoxy)methane	340 U	NA	340 U	350 U

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Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30S01001		30S01101	30S01201
Lab ID	S776068*12	S776068*12*D	S776068*13	S776068*14
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
bis(2-Chloroethyl)ether	340 U	NA	340 U	350 U
bis(2-Ethylhexyl)phthalate	340 UJ	NA	340 UJ	350 UJ
Butylbenzylphthalate	340 UJ	NA	340 UJ	51 J
Carbazole	340 U	NA	340 U	350 U
Chrysene	52 J	NA	42 J	40 J
Di-n-butylphthalate	340 UJ	NA	340 UJ	350 UJ
Di-n-octylphthalate	340 UJ	NA	340 UJ	350 UJ
Dibenz(a,h)anthracene	340 U	NA	340 U	350 U
Dibenzofuran	340 U	NA	340 U	350 U
Diethylphthalate	340 U	NA	340 U	350 U
Dimethylphthalate	340 U	NA	340 U	350 U
Fluoranthene	41 J	NA	41 J	44 J
Fluorene	340 U	NA	340 U	350 U
Hexachlorobenzene	340 U	NA	340 U	350 U
Hexachlorobutadiene	340 U	NA	340 U	350 U
Hexachlorocyclopentadiene	340 U	NA	340 U	350 U
Hexachloroethane	340 U	NA	340 U	350 U
Indeno(1,2,3-cd)pyrene	31 J	NA	33 J	26 J
Isophorone	340 U	NA	340 U	350 U
N-Nitroso-di-n-propylamine	340 U	NA	340 U	350 U
N-Nitrosodiphenylamine	340 U	NA	340 U	350 U
Naphthalene	340 U	NA	340 U	350 U
Nitrobenzene	340 U	NA	340 U	350 U
Pentachlorophenol	860 UJ	NA	860 UJ	880 UJ
Phenanthrene	11 J	NA	9 J	11 J
Phenol	340 U	NA	340 U	350 U
Pyrene	54 J	NA	49 J	51 J
Pesticides/PCBs, ug/kg				
4,4'-DDD	24 J	42 R	3.4 U	3.5 U
4,4'-DDE	36 J	38 R	3.4 U	1.4 J
4,4'-DDT	320 ER	520 DJ	0.66 J	1.7 J
Aldrin	0.35 J	18 UR	1.8 U	1.8 U
alpha-BHC	1.8 U	18 UR	1.8 U	1.8 U
alpha-Chlordane	1.9	2.4 R	1.8 U	0.28 J
Aroclor-1016	34 U	340 UR	34 U	35 U
Aroclor-1221	70 U	700 UR	69 U	71 U

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Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30S01001		30S01101	30S01201
Lab ID	S776068*12	S776068*12*D	S776068*13	S776068*14
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
Aroclor-1232	34 U	340 UR	34 U	35 U
Aroclor-1242	34 U	340 UR	34 U	35 U
Aroclor-1248	34 U	340 UR	34 U	35 U
Aroclor-1254	34 U	340 UR	34 U	35 U
Aroclor-1260	34 U	340 UR	34 U	35 U
beta-BHC	0.12 J	18 UR	1.8 U	0.32 J
delta-BHC	1.8 U	18 UR	1.8 UJ	1.8 UJ
Dieldrin	3.4 U	34 UR	0.13 J	0.2 J
Endosulfan I	1.8 U	18 UR	1.8 U	1.8 U
Endosulfan II	3.4 U	34 UR	3.4 U	3.5 U
Endosulfan sulfate	3.7 J	1.8 R	3.4 U	1.2 J
Endrin	3.4 U	34 UR	3.4 U	3.5 U
Endrin aldehyde	3.4 U	34 UR	3.4 U	3.5 U
Endrin ketone	1.2 J	34 UR	0.54 J	0.69 J
gamma-BHC (Lindane)	1.8 U	18 UR	0.03 J	0.13 J
gamma-Chlordane	1.2 J	1.4 R	0.14 J	0.2 J
Heptachlor	0.14 J	18 UR	1.8 U	1.8 U
Heptachlor epoxide	1.8 U	18 UR	1.8 U	1.8 U
Methoxychlor	6.4 J	180 UR	18 U	18 U
Toxaphene	180 U	1800 UR	180 U	180 U
Herbicides, ug/kg				
2,4,5-T	8.6 U	NA	8.6 U	8.8 U
2,4,5-TP Silvex	8.6 U	NA	8.6 U	8.8 U
2,4-D	8.6 U	NA	8.6 U	8.8 U
2,4-DB	8.6 U	NA	3.7 J	7.5 J
Dalapon	2100 U	NA	2100 U	2100 U
Dicamba	21 UJ	NA	21 UJ	21 UJ
Dichloroprop	100 U	NA	100 U	110 U
Dinoseb	100 UJ	NA	100 UJ	110 UJ
MCPA	2100 U	NA	2100 U	2100 U
MCPP	1300 J	NA	2100 U	2100 U
Inorganics, mg/kg				
Aluminum	421	NA	214	1040
Antimony	0.69 U	NA	0.68 U	0.7 U
Arsenic	0.75 U	NA	0.74 U	0.77 U
Barium	10.1 J	NA	5.5 J	10.9 J

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Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30S01001		30S01101	30S01201
Lab ID	S776068*12	S776068*12*D	S776068*13	S776068*14
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	23-Oct-97
Beryllium	0.04 U	NA	0.04 U	0.04 U
Cadmium	0.12 U	NA	0.12 U	0.2 J
Calcium	4830	NA	11900	12100
Chromium	1.2 J	NA	1.3 J	2.5
Cobalt	0.21 U	NA	0.21 U	0.21 U
Copper	1.6 J	NA	3.2 J	4.8 J
Iron	131	NA	136	255
Lead	51 J	NA	3.4 J	11.1 J
Magnesium	64.3 U	NA	104 U	121 U
Manganese	4	NA	4.7	7.3
Mercury	0.03 J	NA	0.02 U	0.04 J
Nickel	0.59 J	NA	0.47 U	0.75 J
Potassium	30.7 U	NA	23.2 U	33.2 U
Selenium	0.64 U	NA	0.54 U	0.55 U
Silver	0.62 U	NA	0.62 U	0.64 U
Sodium	60.1 UJ	NA	54.4 UJ	68.5 UJ
Thallium	0.98 U	NA	0.97 U	1 U
Vanadium	1.3 U	NA	1.2 U	1.8 U
Zinc	14	NA	8 U	13.9

Appendix E
Table E-1. Summary Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101	30B00101D			30B00201	30B00301	30B00301D	30B00401	30B00501	30B00601			30B00701
Lab ID	S776068*15	S776068*6	S776068*6*R	S776201*13	S776201*14	S776201*21	S776201*23	S776068*1	S776068*17	S776068*17*D	S776068*18		
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	30-Oct-97	31-Oct-97	31-Oct-97	30-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97		
Volatile organics, ug/kg													
1,1,1-Trichloroethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,1,2,2-Tetrachloroethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,1,2-Trichloroethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,1-Dichloroethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,1-Dichloroethene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,2-Dichloroethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,2-Dichloroethene (total)	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
1,2-Dichloropropane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
2-Butanone	11 U	11 U	NA	12 UJ	12 UJ	12 UJ	11 UJ	10 U	10 U	NA		11 U	
2-Hexanone	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
4-Methyl-2-pentanone	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Acetone	11 UJ	11 U	NA	12 U	12 U	12 U	11 U	10 UJ	10 UJ	NA		11 UJ	
Benzene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Bromodichloromethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Bromoform	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Bromomethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Carbon disulfide	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Carbon tetrachloride	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Chlorobenzene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Chloroethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Chloroform	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Chloromethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
cis-1,3-Dichloropropene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Dibromochloromethane	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Ethylbenzene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Methylene chloride	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Styrene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Tetrachloroethene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Toluene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
trans-1,3-Dichloropropene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Trichloroethene	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Vinyl chloride	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Xylene (total)	11 U	11 U	NA	12 U	12 U	12 U	11 U	10 U	10 U	NA		11 U	
Semivolatile organics, ug/kg													

Appendix E
Table E-1. Summary Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101	30B00101D			30B00201	30B00301	30B00301D	30B00401	30B00501	30B00601			30B00701
Lab ID	S776068*15	S776068*6	S776068*6*R	S776201*13	S776201*14	S776201*21	S776201*23	S776068*1	S776068*17	S776068*17*D	S776068*18		
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	30-Oct-97	31-Oct-97	31-Oct-97	30-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97		
1,2,4-Trichlorobenzene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
1,2-Dichlorobenzene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
1,3-Dichlorobenzene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
1,4-Dichlorobenzene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2,2'-oxybis(1-Chloropropane	360 UJ	360 UR	360 UJ	410 U	390 U	390 UJ	370 UJ	340 UJ	340 UJ	NA	370 UJ		
2,4,5-Trichlorophenol	900 U	900 UR	900 U	1000 U	990 U	980 U	930 U	850 U	860 U	NA	930 U		
2,4,6-Trichlorophenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2,4-Dichlorophenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2,4-Dimethylphenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2,4-Dinitrophenol	900 UJ	900 UR	900 UJ	1000 U	990 U	980 UJ	930 UJ	850 UJ	860 UJ	NA	930 UJ		
2,4-Dinitrotoluene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2,6-Dinitrotoluene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2-Chloronaphthalene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2-Chlorophenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2-Methylnaphthalene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2-Methylphenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
2-Nitroaniline	900 U	900 UR	900 U	1000 U	990 U	980 U	930 U	850 U	860 U	NA	930 U		
2-Nitrophenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
3,3'-Dichlorobenzidine	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
3-Methylphenol/4-Methylphe	360 U	360 UR	360 UJ	410 U	390 U	390 U	370 UJ	340 U	340 U	NA	370 U		
3-Nitroaniline	900 U	900 UR	900 U	1000 U	990 U	980 U	930 U	850 U	860 U	NA	930 U		
4,6-Dinitro-2-methylphenol	900 UJ	900 UR	900 U	1000 U	990 U	980 UJ	930 UJ	850 UJ	860 UJ	NA	930 UJ		
4-Bromophenyl-phenylether	360 U	360 UR	360 UJ	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
4-Chloro-3-methylphenol	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
4-Chloroaniline	360 U	360 UR	360 U	410 UJ	390 UJ	390 U	370 U	340 U	340 U	NA	370 U		
4-Chlorophenyl-phenylether	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
4-Nitroaniline	900 UJ	900 UR	900 U	1000 U	990 U	980 U	930 U	850 UJ	860 UJ	NA	930 UJ		
4-Nitrophenol	900 UJ	900 UR	900 UJ	1000 U	990 U	980 UJ	930 UJ	850 UJ	860 UJ	NA	930 UJ		
Acenaphthene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
Acenaphthylene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	7 J	NA	370 U		
Anthracene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U		
Benzo(a)anthracene	360 U	360 UR	12 J	410 U	390 U	390 U	370 U	340 U	20 J	NA	370 U		
Benzo(a)pyrene	360 U	360 UR	20 J	410 U	390 U	390 U	370 U	340 U	22 J	NA	370 U		
Benzo(b)fluoranthene	360 U	360 UR	19 J	410 U	390 U	390 U	370 U	340 U	40 J	NA	370 U		
Benzo(g,h,i)perylene	360 U	360 UR	360 U	410 U	390 U	390 U	370 U	340 U	13 J	NA	370 U		

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Table E-1. Summary Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101	30B00101D			30B00201	30B00301	30B00301D	30B00401	30B00501	30B00601		30B00701
Lab ID	S776068*15	S776068*6	S776068*6*R		S776201*13	S776201*14	S776201*21	S776201*23	S776068*1	S776068*17 S776068*17*D		S776068*18
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97		30-Oct-97	31-Oct-97	31-Oct-97	30-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97
Benzo(k)fluoranthene	360 U	360 UR	27 J		410 U	390 U	390 U	370 U	340 U	15 J	NA	370 U
bis(2-Chloroethoxy)methane	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
bis(2-Chloroethyl)ether	360 U	360 UR	360 U		410 U	390 UJ	390 U	370 UJ	340 U	340 U	NA	370 U
bis(2-Ethylhexyl)phthalate	360 UJ	360 UR	210 J		410 U	390 U	390 U	370 U	340 UJ	150 J	NA	370 UJ
Butylbenzylphthalate	360 UJ	360 UR	360 U		410 U	390 U	390 U	370 U	340 UJ	340 UJ	NA	370 UJ
Carbazole	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Chrysene	360 U	360 UR	33 J		410 U	390 U	390 U	370 U	340 U	32 J	NA	370 U
Di-n-butylphthalate	360 UJ	360 UR	360 U		410 U	390 U	390 U	370 U	340 UJ	42 J	NA	370 UJ
Di-n-octylphthalate	360 UJ	360 UR	360 U		410 U	390 U	390 U	370 U	340 UJ	340 UJ	NA	370 UJ
Dibenz(a,h)anthracene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Dibenzofuran	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Diethylphthalate	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Dimethylphthalate	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Fluoranthene	360 U	360 UR	41 J		8 J	390 U	390 U	370 U	340 U	36 J	NA	370 U
Fluorene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Hexachlorobenzene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Hexachlorobutadiene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Hexachlorocyclopentadiene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Hexachloroethane	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Indeno(1,2,3-cd)pyrene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	16 J	NA	370 U
Isophorone	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
N-Nitroso-di-n-propylamine	360 U	360 UR	360 UJ		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
N-Nitrosodiphenylamine	360 U	360 UR	360 U		410 U	390 U	390 U	370 UJ	340 U	340 U	NA	370 U
Naphthalene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Nitrobenzene	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Pentachlorophenol	900 UJ	900 UR	900 UJ		1000 U	990 U	980 UJ	930 UJ	850 UJ	860 UJ	NA	930 UJ
Phenanthrene	360 U	360 UR	20 J		410 U	390 U	390 U	370 U	340 U	12 J	NA	370 U
Phenol	360 U	360 UR	360 U		410 U	390 U	390 U	370 U	340 U	340 U	NA	370 U
Pyrene	360 U	360 UR	57 J		410 U	390 U	390 U	370 U	340 U	43 J	NA	370 U
Pesticides/PCBs, ug/kg												
4,4'-DDD	3.6 U	3.6 U	NA		4.1 UJ	3.9 U	3.9 U	3.7 U	3.4 U	6.3 J	28 DR	3.7 U
4,4'-DDE	3.6 U	3.6 U	NA		4.1 UJ	3.9 U	3.9 U	3.7 U	3.4 U	220 ER	200 D	3.7 U
4,4'-DDT	0.34 J	0.15 J	NA		4.1 UJ	3.9 UJ	0.54 J	3.7 U	3.4 U	270 ER	270 DJ	3.7 UJ
Aldrin	1.8 U	1.8 U	NA		2.1 UJ	0.09 J	0.05 J	1.9 U	1.7 U	1.8 U	18 UR	1.9 U
alpha-BHC	1.8 U	1.8 U	NA		2.1 UJ	2 U	2 U	1.9 U	1.7 U	1.8 U	18 UR	1.9 U

Appendix E
Table E-1. Summary Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101	30B00101D			30B00201	30B00301	30B00301D	30B00401	30B00501	30B00601		30B00701
Lab ID	S776068*15	S776068*6	S776068*6*R		S776201*13	S776201*14	S776201*21	S776201*23	S776068*1	S776068*17	S776068*17*D	S776068*18
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97		30-Oct-97	31-Oct-97	31-Oct-97	30-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97
alpha-Chlordane	1.8 U	1.8 U	NA		2.1 UJ	2 UJ	0.07 J	1.9 U	1.7 U	26 ER	27 D	1.9 U
Aroclor-1016	36 U	36 U	NA		41 UJ	39 U	39 U	37 U	34 U	34 U	340 UR	37 U
Aroclor-1221	73 U	73 U	NA		83 UJ	80 U	79 U	75 U	68 U	69 U	690 UR	75 U
Aroclor-1232	36 U	36 U	NA		41 UJ	39 U	39 U	37 U	34 U	34 U	340 UR	37 U
Aroclor-1242	36 U	36 U	NA		41 UJ	39 U	39 U	37 U	34 U	34 U	340 UR	37 U
Aroclor-1248	36 U	36 U	NA		41 UJ	39 U	39 U	37 U	34 U	34 U	340 UR	37 U
Aroclor-1254	36 U	36 U	NA		41 UJ	39 U	39 U	37 U	34 U	34 U	340 UR	37 U
Aroclor-1260	36 U	36 U	NA		41 UJ	39 U	39 U	37 U	34 U	34 U	340 UR	37 U
beta-BHC	1.8 UJ	0.18 J	NA		2.1 UJ	2 UJ	2 U	1.9 U	1.7 U	0.12 J	18 UR	1.9 U
delta-BHC	1.8 UJ	1.8 U	NA		2.1 UJ	0.1 J	2 UJ	1.9 U	1.7 UJ	0.05 J	18 UR	1.9 UJ
Dieldrin	3.6 U	3.6 U	NA		4.1 UJ	2.3 J	2.7 J	3.7 U	3.4 U	3.4 U	34 UR	3.7 U
Endosulfan I	1.8 U	1.8 U	NA		2.1 UJ	2 U	2 U	1.9 U	1.7 U	1.8 U	18 UR	1.9 U
Endosulfan II	3.6 U	3.6 U	NA		4.1 UJ	3.9 U	3.9 U	3.7 U	3.4 U	3.4 U	34 UR	3.7 U
Endosulfan sulfate	3.6 U	3.6 U	NA		4.1 UJ	3.9 U	3.9 U	3.7 U	3.4 U	7.8 J	34 UR	3.7 U
Endrin	3.6 U	3.6 U	NA		4.1 UJ	3.9 U	3.9 U	3.7 U	3.4 U	3.4 U	34 UR	3.7 U
Endrin aldehyde	3.6 U	3.6 U	NA		4.1 UJ	3.9 U	3.9 U	3.7 U	3.4 U	3.4 U	34 UR	3.7 U
Endrin ketone	3.6 U	3.6 U	NA		0.18 J	0.95 J	3.9 UJ	3.7 U	0.49 J	1.4 J	34 UR	0.36 J
gamma-BHC (Lindane)	1.8 U	1.8 U	NA		2.1 UJ	2 U	2 U	1.9 U	1.7 U	0.16 J	18 UR	1.9 U
gamma-Chlordane	1.8 U	1.8 U	NA		2.1 UJ	2 UJ	0.11 J	1.9 U	1.7 U	27 ER	29 D	1.9 U
Heptachlor	1.8 UJ	0.11 J	NA		2.1 UJ	2 UJ	0.07 J	0.09 J	1.7 U	0.44 J	18 UR	1.9 U
Heptachlor epoxide	1.8 U	1.8 U	NA		2.1 UJ	2 U	2 U	1.9 U	1.7 U	1.2 J	1.4 DR	1.9 U
Methoxychlor	18 UJ	18 U	NA		21 UJ	20 UJ	0.48 J	19 U	17 U	18 U	180 UR	19 U
Toxaphene	180 U	180 U	NA		210 UJ	200 U	200 U	190 U	170 U	180 U	1800 UR	190 U
Herbicides, ug/kg												
2,4,5-T	NA	NA	NA		NA	NA	NA	9.3 U	0.4 J	8.6 U	NA	9.3 U
2,4,5-TP Silvex	NA	NA	NA		NA	NA	NA	9.3 U	8.5 U	8.6 U	NA	9.3 U
2,4-D	NA	NA	NA		NA	NA	NA	9.3 U	8.5 U	8.6 U	NA	9.3 U
2,4-DB	NA	NA	NA		NA	NA	NA	9.3 U	8.5 U	8.6 U	NA	9.3 U
Dalapon	NA	NA	NA		NA	NA	NA	2200 U	2000 U	2100 U	NA	2200 U
Dicamba	NA	NA	NA		NA	NA	NA	22 U	20 UJ	21 UJ	NA	22 UJ
Dichloroprop	NA	NA	NA		NA	NA	NA	110 U	100 U	100 U	NA	110 U
Dinoseb	NA	NA	NA		NA	NA	NA	110 U	100 UJ	100 UJ	NA	110 UJ
MCPA	NA	NA	NA		NA	NA	NA	2200 U	2000 U	2100 U	NA	2200 U
MCPP	NA	NA	NA		NA	NA	NA	2200 U	2000 U	2100 U	NA	2200 U
Inorganics, mg/kg												

Appendix E
Table E-1. Summary Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30B00101	30B00101D		30B00201	30B00301	30B00301D	30B00401	30B00501	30B00601		30B00701
Lab ID	S776068*15	S776068*6	S776068*6*R	S776201*13	S776201*14	S776201*21	S776201*23	S776068*1	S776068*17	S776068*17*D	S776068*18
Sampling Date	23-Oct-97	23-Oct-97	23-Oct-97	30-Oct-97	31-Oct-97	31-Oct-97	30-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97	24-Oct-97
Aluminum	105	112	NA	415 J	224 J	247 J	205 J	19.1 U	975	NA	43.5 U
Antimony	0.72 U	0.72 U	NA	2.7 U	0.79 UJ	2.6 UJ	2.3 U	0.67 U	0.68 U	NA	0.74 U
Arsenic	0.78 U	0.78 U	NA	1.5 J	0.86 UJ	2.3 J	1.5 J	0.73 U	0.74 U	NA	0.81 U
Barium	0.42 U	0.44 U	NA	0.75 UJ	0.47 UJ	0.69 UJ	0.89 UJ	0.91 J	10.5 J	NA	0.9 U
Beryllium	0.04 U	0.04 U	NA	0.05 U	0.05 U	0.05 U	0.04 U	0.04 U	0.04 U	NA	0.04 U
Cadmium	0.13 U	0.13 U	NA	0.15 U	0.14 U	0.14 U	0.13 U	0.12 U	0.12 U	NA	0.13 U
Calcium	654 J	1120 J	NA	83.3 J	2940 J	1140 J	103 J	578 J	7770	NA	1550
Chromium	0.56 J	0.69 J	NA	2.5	1.8 J	2.3 J	2.2 J	0.41 U	4	NA	1.3 J
Cobalt	0.22 U	0.22 U	NA	0.89 J	0.3 J	1 J	0.73 J	0.2 U	0.21 U	NA	0.22 U
Copper	0.65 J	0.48 UJ	NA	0.63 J	0.52 U	0.52 U	0.74 J	0.45 U	1.4 J	NA	0.49 U
Iron	17.6 J	12.2 J	NA	16.9 J	25.1 J	22.4 J	17.6 J	7.2 U	1390	NA	13 J
Lead	0.59 J	1 J	NA	0.74 J	0.58 J	0.53 J	1.1 J	0.59 J	52.2 J	NA	4.6 J
Magnesium	20.7 J	16.8 U	NA	9.4 U	25 J	19.4 J	11.1 J	3.1 U	229 U	NA	13.4 U
Manganese	0.53 U	0.41 U	NA	0.44 J	0.51 U	0.44 U	0.38 U	0.35 U	55.1	NA	0.64 U
Mercury	0.02 U	0.02 U	NA	0.03 U	0.03 U	0.03 U	0.03 J	0.03 U	0.04 J	NA	0.03 U
Nickel	0.5 U	0.5 U	NA	0.57 U	6 U	6.8 U	0.52 U	0.47 U	0.47 U	NA	0.52 U
Potassium	15.7 U	23.4 U	NA	13.3 U	12.9 U	12.7 U	12.8 U	11 U	46 U	NA	15.9 U
Selenium	0.57 U	0.57 U	NA	0.79 J	0.62 UJ	1.3 J	0.58 U	0.53 U	0.54 U	NA	0.93 U
Silver	0.65 U	0.65 U	NA	1.1 J	0.71 UJ	1.5 J	0.97 J	0.61 U	0.62 U	NA	0.67 U
Sodium	30 UJ	68.5 UJ	NA	49.9 UJ	63.1 UJ	49.6 UJ	40.2 UJ	31 UJ	90.1 UJ	NA	47.6 UJ
Thallium	1 U	1 U	NA	1.2 U	1.1 U	1.1 U	1.3 J	0.96 U	0.97 U	NA	1.1 U
Vanadium	0.76 U	0.66 U	NA	0.5 J	0.4 U	0.4 U	0.38 U	0.6 U	3.9 U	NA	0.38 U
Zinc	0.9 J	0.27 UJ	NA	0.22 UJ	0.43 UJ	0.38 UJ	0.35 UJ	0.2 J	71.3	NA	0.48 U
General Chemistry, mg/kg											
TRPH	10 U	NA	NA	13	28	NA	13	10 U	45	NA	10 U

Appendix E
Table E-1. Summary of Soil Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

NA =	Identified parameter not analyzed.
Sample ID =	Sample Identifier
Lab ID =	Laboratory identifier
Units:	
mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter
	The following standard analytical data qualifiers have the following definitions:
U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit. The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.

TABLE E-2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30G00101	30G00201	30G00301	30G00301D	30G00401	30G00501	30G00601	30G00701	30G00801	30H00101	30H0
Lab ID	S776431*3	S776431*2	S776431*1	S776431*4	S776397*2	S776463*1	S776463*2	S776397*1	S776463*3	S776431*8	S7764
Sampling Date	12-Nov-97	12-Nov-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97	12-Nov-97	12-Nov-97
Volatile organics, ug/L											
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,2,4-Trichlorobenzene	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	NA	NA
1,2-Dibromo-3-chloropropane	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	1 UR	NA	NA
1,2-Dibromoethane (EDB)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
2-Butanone	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 UJ	5 UJ	5 U	5 UJ	NA	NA
2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA
4-Methyl-2-pentanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	NA	NA
Acetone	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	5 UR	NA	NA
Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Bromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Carbon disulfide	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 UJ	1 UJ	1 U	1 UJ	NA	NA
Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Methylene chloride	2 U	2 U	2 UJ	8 J	2 U	2 U	2 U	20	2 U	NA	NA
Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
trans-1,2-Dichloroethylene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30G00101	30G00201	30G00301	30G00301D	30G00401	30G00501	30G00601	30G00701	30G00801	30H00101	30H0
Lab ID	S776431*3	S776431*2	S776431*1	S776431*4	S776397*2	S776463*1	S776463*2	S776397*1	S776463*3	S776431*8	S7764
Sampling Date	12-Nov-97	12-Nov-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97	12-Nov-97	12-Nov-97
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Xylene (total)	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
Semivolatile organics, ug/L											
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,3-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	NA	NA
2,2'-oxybis(1-Chloropropane)	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2,4,5-Trichlorophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
2,4,6-Trichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2,4-Dichlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2,4-Dimethylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2,4-Dinitrophenol	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	NA	NA
2,4-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2,6-Dinitrotoluene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2-Chloronaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2-Chlorophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2-Methylnaphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
2-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
2-Nitrophenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
3,3'-Dichlorobenzidine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
3-Methylphenol/4-Methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
3-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
4,6-Dinitro-2-methylphenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
4-Bromophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
4-Chloro-3-methylphenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
4-Chloroaniline	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
4-Chlorophenyl-phenylether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
4-Nitroaniline	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
4-Nitrophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
Acenaphthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Acenaphthylene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30G00101	30G00201	30G00301	30G00301D	30G00401	30G00501	30G00601	30G00701	30G00801	30H00101	30H0
Lab ID	S776431*3	S776431*2	S776431*1	S776431*4	S776397*2	S776463*1	S776463*2	S776397*1	S776463*3	S776431*8	S7764
Sampling Date	12-Nov-97	12-Nov-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97	12-Nov-97	12-Nov-97
Benzo(a)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Benzo(a)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
Benzo(b)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
Benzo(g,h,i)perylene	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
Benzo(k)fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
bis(2-Chloroethoxy)methane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
bis(2-Chloroethyl)ether	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
bis(2-Ethylhexyl)phthalate	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U	NA	NA
Butylbenzylphthalate	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U	NA	NA
Carbazole	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Chrysene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Di-n-butylphthalate	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 U	NA	NA
Di-n-octylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
Dibenz(a,h)anthracene	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
Dibenzofuran	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Diethylphthalate	1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Dimethylphthalate	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Fluoranthene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Fluorene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Hexachlorobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Hexachlorobutadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Hexachlorocyclopentadiene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Hexachloroethane	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Indeno(1,2,3-cd)pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	NA
Isophorone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
N-Nitroso-di-n-propylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
N-Nitrosodiphenylamine	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Naphthalene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Nitrobenzene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Pentachlorophenol	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	NA	NA
Phenanthrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Phenol	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Pyrene	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	NA
Pesticides/PCBs, ug/L											
4,4'-DDD	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	30G00101	30G00201	30G00301	30G00301D	30G00401	30G00501	30G00601	30G00701	30G00801	30H00101	30H0
Lab ID	S776431*3	S776431*2	S776431*1	S776431*4	S776397*2	S776463*1	S776463*2	S776397*1	S776463*3	S776431*8	S7764
Sampling Date	12-Nov-97	12-Nov-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97	12-Nov-97	12-Nov-97
4,4'-DDE	0.1 UJ	0.0016 J	0.1 U	0.1 UJ	0.0016 J	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
4,4'-DDT	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
Aldrin	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
alpha-BHC	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
alpha-Chlordane	0.0024 J	0.05 UJ	0.05 UJ	0.05 UJ	0.0022 J	0.0015 J	0.05 UJ	0.05 U	0.05 UJ	NA	NA
Aroclor-1016	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	NA	NA
Aroclor-1221	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U	2 UJ	2 U	2 UJ	NA	NA
Aroclor-1232	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	NA	NA
Aroclor-1242	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	NA	NA
Aroclor-1248	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	NA	NA
Aroclor-1254	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	NA	NA
Aroclor-1260	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U	1 UJ	1 U	1 UJ	NA	NA
beta-BHC	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
delta-BHC	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
Dieldrin	0.1 UJ	0.1 U	0.011 J	0.01 J	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
Endosulfan I	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
Endosulfan II	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
Endosulfan sulfate	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
Endrin	0.1 UJ	0.1 UJ	0.1 U	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
Endrin aldehyde	0.1 UJ	0.1 UJ	0.1 UJ	0.1 UJ	0.1 U	0.1 U	0.1 UJ	0.1 U	0.1 UJ	NA	NA
Endrin ketone	0.1 UJ	0.0029 J	0.0028 J	0.1 UJ	0.1 U	0.0043 J	0.1 UJ	0.1 U	0.0038 J	NA	NA
gamma-BHC (Lindane)	0.0043 J	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.0065 J	0.05 U	0.0049 J	NA	NA
gamma-Chlordane	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ	0.0055 J	0.05 U	0.0029 J	0.05 U	0.05 UJ	NA	NA
Heptachlor	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
Heptachlor epoxide	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 UJ	NA	NA
Methoxychlor	0.5 UJ	0.5 U	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	0.5 UJ	NA	NA
Toxaphene	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U	5 UJ	5 U	5 UJ	NA	NA
Herbicides, ug/L											
2,4,5-T	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
2,4,5-TP Silvex	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
2,4-D	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
2,4-DB	NA	NA	NA	NA	0.5 U	0.5 U	0.5 U	0.5 U	NA	NA	NA
Dalapon	NA	NA	NA	NA	120 U	120 U	120 U	120 U	NA	NA	NA
Dicamba	NA	NA	NA	NA	1.2 U	1.2 U	1.2 U	1.2 U	NA	NA	NA
Dichloroprop	NA	NA	NA	NA	6 U	6 U	6 U	6 U	NA	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
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Sample ID	30G00101	30G00201	30G00301	30G00301D	30G00401	30G00501	30G00601	30G00701	30G00801	30H00101	30H0
Lab ID	S776431*3	S776431*2	S776431*1	S776431*4	S776397*2	S776463*1	S776463*2	S776397*1	S776463*3	S776431*8	S7764
Sampling Date	12-Nov-97	12-Nov-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97	12-Nov-97	12-Nov
Dinoseb	NA	NA	NA	NA	6 U	6 U	6 U	6 U	NA	NA	NA
MCPA	NA	NA	NA	NA	120 U	120 U	120 U	120 U	NA	NA	NA
MCPP	NA	NA	NA	NA	120 U	120 U	120 U	120 U	NA	NA	NA
Inorganics, ug/L											
Aluminum	4130	451	1120	1130	443	350	1930	264	401	516	276
Antimony	3.3 U	3.3 U	3.8 J	3.3 UJ	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.3 U	3.7
Arsenic	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	5 J	3.6 U	3.6 U	3.6
Barium	26.1 J	5.6 U	11.2 U	11.3 U	4.3 U	9.2 U	34.6 J	9.7 U	5 U	12.6 U	5.1
Beryllium	0.29 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
Cadmium	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6
Calcium	2380 J	41300	62900	63100	57900	38000	20800	37100	25800	1930 J	40300
Chromium	9.9 U	3 U	113 J	2.9 UJ	2.6 U	6.5 U	20.2 U	2.2 U	3 U	6.4 UJ	392
Cobalt	1.2 J	1 U	3.5 J	1 UJ	1 U	1 U	1.9 J	1 U	1 U	1 U	7.1
Copper	8.3 J	2.2 U	5.2 J	2.5 J	2.7 J	3.6 J	6.9 J	2.2 U	3.9 J	2.2 U	7.2
Iron	958	46.9 U	597 J	139 UJ	35.3 U	58 U	133	76.5 U	299	742 J	1740
Lead	6.3	1.2 U	1.2 U	1.2 U	1.2 U	1.6 J	7.7	1.2 U	1.2 U	1.2 U	1.2
Magnesium	1430 J	1660 J	2140 J	2140 J	2640 J	1720 J	2620 J	2330 J	1830 J	1320 J	1630
Manganese	4.6 U	1.6 U	34.1 J	4.1 UJ	1.2 U	8.9 U	10.2 U	1.1 U	4.8 U	5.2 UJ	86.8
Mercury	0.22	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.15
Nickel	2.9 U	2.7 U	151 J	2.3 UJ	2.3 U	40.1 U	48.6	2.3 U	9.5 U	8.5 UJ	435
Potassium	267 U	3270 J	12400	12800	7730	970 J	3620 J	1370 J	22300	271 U	3310
Selenium	2.7 J	2.6 J	2.6 U	2.6 U	4.4 J	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U	2.6
Silver	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3
Sodium	3580 J	7460	11100	11000	8150	11500	9560	13200	14900	3730 J	8950
Thallium	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7
Vanadium	9.9 U	4.6 U	7.9 J	8.5 U	4.1 U	1.7 U	7.6 U	1.7 U	1.7 U	1.7 U	5.8
Zinc	4.1 U	3.2 U	11.1 UJ	3.4 UJ	5.5 U	55.8	30.3	4.4 U	13 U	6.9 U	14.4
General Chemistry, mg/L											
Suspended Solids	150	5 U	7	6	5 U	5 U	5	5 U	5 U	NA	NA
TRPH	1 U	1 U	1 U	NA	1 U	1 U	1 U	1 U	1 U	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	201	30H00301	30H00301D	30H00401	30H00501	30H00601	30H00701	30H00801
Lab ID	1*7	S776431*5	S776431*6	S776397*4	S776463*6	S776463*7	S776397*3	S776463*5
Sampling Date	-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97
Volatile organics, ug/L								
1,1,1-Trichloroethane		NA	NA	NA	NA	NA	NA	NA
1,1,2,2-Tetrachloroethane		NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloroethane		NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane		NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene		NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene		NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane		NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane (EDB)		NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane		NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane		NA	NA	NA	NA	NA	NA	NA
2-Butanone		NA	NA	NA	NA	NA	NA	NA
2-Hexanone		NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone		NA	NA	NA	NA	NA	NA	NA
Acetone		NA	NA	NA	NA	NA	NA	NA
Benzene		NA	NA	NA	NA	NA	NA	NA
Bromochloromethane		NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane		NA	NA	NA	NA	NA	NA	NA
Bromoform		NA	NA	NA	NA	NA	NA	NA
Bromomethane		NA	NA	NA	NA	NA	NA	NA
Carbon disulfide		NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride		NA	NA	NA	NA	NA	NA	NA
Chlorobenzene		NA	NA	NA	NA	NA	NA	NA
Chloroethane		NA	NA	NA	NA	NA	NA	NA
Chloroform		NA	NA	NA	NA	NA	NA	NA
Chloromethane		NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene		NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene		NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane		NA	NA	NA	NA	NA	NA	NA
Ethylbenzene		NA	NA	NA	NA	NA	NA	NA
Methylene chloride		NA	NA	NA	NA	NA	NA	NA
Styrene		NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene		NA	NA	NA	NA	NA	NA	NA
Toluene		NA	NA	NA	NA	NA	NA	NA
trans-1,2-Dichloroethylene		NA	NA	NA	NA	NA	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	201	30H00301	30H00301D	30H00401	30H00501	30H00601	30H00701	30H00801
Lab ID	1*7	S776431*5	S776431*6	S776397*4	S776463*6	S776463*7	S776397*3	S776463*5
Sampling Date	-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97
trans-1,3-Dichloropropene		NA	NA	NA	NA	NA	NA	NA
Trichloroethene		NA	NA	NA	NA	NA	NA	NA
Vinyl chloride		NA	NA	NA	NA	NA	NA	NA
Xylene (total)		NA	NA	NA	NA	NA	NA	NA
Semivolatiles organics, ug/L								
1,2-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene		NA	NA	NA	NA	NA	NA	NA
2,2'-oxybis(1-Chloropropane)		NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol		NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol		NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol		NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol		NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol		NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene		NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene		NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene		NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol		NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene		NA	NA	NA	NA	NA	NA	NA
2-Methylphenol		NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline		NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol		NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine		NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol		NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline		NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol		NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl-phenylether		NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol		NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline		NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl-phenylether		NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline		NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol		NA	NA	NA	NA	NA	NA	NA
Acenaphthene		NA	NA	NA	NA	NA	NA	NA
Acenaphthylene		NA	NA	NA	NA	NA	NA	NA
Anthracene		NA	NA	NA	NA	NA	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	201	30H00301	30H00301D	30H00401	30H00501	30H00601	30H00701	30H00801
Lab ID	1*7	S776431*5	S776431*6	S776397*4	S776463*6	S776463*7	S776397*3	S776463*5
Sampling Date	-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97
Benzo(a)anthracene		NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene		NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene		NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene		NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene		NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane		NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether		NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate		NA	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate		NA	NA	NA	NA	NA	NA	NA
Carbazole		NA	NA	NA	NA	NA	NA	NA
Chrysene		NA	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate		NA	NA	NA	NA	NA	NA	NA
Di-n-octylphthalate		NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene		NA	NA	NA	NA	NA	NA	NA
Dibenzofuran		NA	NA	NA	NA	NA	NA	NA
Diethylphthalate		NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate		NA	NA	NA	NA	NA	NA	NA
Fluoranthene		NA	NA	NA	NA	NA	NA	NA
Fluorene		NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene		NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene		NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene		NA	NA	NA	NA	NA	NA	NA
Hexachloroethane		NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene		NA	NA	NA	NA	NA	NA	NA
Isophorone		NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine		NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine		NA	NA	NA	NA	NA	NA	NA
Naphthalene		NA	NA	NA	NA	NA	NA	NA
Nitrobenzene		NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol		NA	NA	NA	NA	NA	NA	NA
Phenanthrene		NA	NA	NA	NA	NA	NA	NA
Phenol		NA	NA	NA	NA	NA	NA	NA
Pyrene		NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs, ug/L								
4,4'-DDD		NA	NA	NA	NA	NA	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
Study Area 30

Naval Training Center, Orlando
Orlando, FL

Sample ID	201	30H00301	30H00301D	30H00401	30H00501	30H00601	30H00701	30H00801
Lab ID	1*7	S776431*5	S776431*6	S776397*4	S776463*6	S776463*7	S776397*3	S776463*5
Sampling Date	-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97
4,4'-DDE		NA	NA	NA	NA	NA	NA	NA
4,4'-DDT		NA	NA	NA	NA	NA	NA	NA
Aldrin		NA	NA	NA	NA	NA	NA	NA
alpha-BHC		NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane		NA	NA	NA	NA	NA	NA	NA
Aroclor-1016		NA	NA	NA	NA	NA	NA	NA
Aroclor-1221		NA	NA	NA	NA	NA	NA	NA
Aroclor-1232		NA	NA	NA	NA	NA	NA	NA
Aroclor-1242		NA	NA	NA	NA	NA	NA	NA
Aroclor-1248		NA	NA	NA	NA	NA	NA	NA
Aroclor-1254		NA	NA	NA	NA	NA	NA	NA
Aroclor-1260		NA	NA	NA	NA	NA	NA	NA
beta-BHC		NA	NA	NA	NA	NA	NA	NA
delta-BHC		NA	NA	NA	NA	NA	NA	NA
Dieldrin		NA	NA	NA	NA	NA	NA	NA
Endosulfan I		NA	NA	NA	NA	NA	NA	NA
Endosulfan II		NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate		NA	NA	NA	NA	NA	NA	NA
Endrin		NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde		NA	NA	NA	NA	NA	NA	NA
Endrin ketone		NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)		NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane		NA	NA	NA	NA	NA	NA	NA
Heptachlor		NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide		NA	NA	NA	NA	NA	NA	NA
Methoxychlor		NA	NA	NA	NA	NA	NA	NA
Toxaphene		NA	NA	NA	NA	NA	NA	NA
Herbicides, ug/L								
2,4,5-T		NA	NA	NA	NA	NA	NA	NA
2,4,5-TP Silvex		NA	NA	NA	NA	NA	NA	NA
2,4-D		NA	NA	NA	NA	NA	NA	NA
2,4-DB		NA	NA	NA	NA	NA	NA	NA
Dalapon		NA	NA	NA	NA	NA	NA	NA
Dicamba		NA	NA	NA	NA	NA	NA	NA
Dichloroprop		NA	NA	NA	NA	NA	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
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Naval Training Center, Orlando
Orlando, FL

Sample ID	201	30H00301	30H00301D	30H00401	30H00501	30H00601	30H00701	30H00801
Lab ID	1*7	S776431*5	S776431*6	S776397*4	S776463*6	S776463*7	S776397*3	S776463*5
Sampling Date	-97	12-Nov-97	12-Nov-97	11-Nov-97	13-Nov-97	13-Nov-97	11-Nov-97	13-Nov-97
Dinoseb		NA	NA	NA	NA	NA	NA	NA
MCPA		NA	NA	NA	NA	NA	NA	NA
MCPP		NA	NA	NA	NA	NA	NA	NA
Inorganics, ug/L								
Aluminum		739	714	117 J	71.8 J	376	128 J	291
Antimony	J	3.5 J	3.3 UJ	3.8 J	3.3 U	3.3 U	3.3 U	3.3 U
Arsenic	U	3.6 U	3.6 U	3.6 U	3.6 U	3.6 U	3.8 J	3.6 U
Barium	U	10.4 U	10.2 U	2.7 U	3.9 U	5.5 U	8.2 U	4.1 U
Beryllium	U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cadmium	U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Calcium		60600	59600	56300	38700	18600	36300	24500
Chromium	J	51.7 J	31.2 UJ	2 UJ	10.2 UJ	14 UJ	2 UJ	7.8 UJ
Cobalt	J	2 J	1.1 J	1 U	1 U	1 U	1 U	1 U
Copper	J	3.8 J	2.8 J	2.2 U	2.6 J	2.2 J	2.2 U	2.7 J
Iron	J	361 J	337 J	35.3 UJ	54.9 UJ	75.2 UJ	58 UJ	288 UJ
Lead	U	1.2 U	1.2 U	1.2 U	1.2 U	1.5 J	1.2 U	1.2 U
Magnesium	J	2170 J	2140 J	2620 J	1750 J	2370 J	2270 J	1770 J
Manganese	J	19.4 J	10.6 UJ	1.4 UJ	3.9 UJ	5.7 UJ	0.85 UJ	5.7 UJ
Mercury	J	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nickel	J	85.6 J	34.3 UJ	2.3 UJ	18.3 UJ	22.8 UJ	2.3 UJ	14.3 UJ
Potassium	J	11600	11300	7480	916 J	3390 J	1330 J	23000
Selenium	U	2.6 U	2.6 U	3.1 J	2.6 U	2.6 U	2.6 U	2.6 U
Silver	U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Sodium		11700	11600	8180	12400	9380	13000	14900
Thallium	U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U	4.7 U
Vanadium	U	7.1 U	6.7 U	4.1 U	1.7 U	3.1 U	1.7 U	1.7 U
Zinc	U	5.4 U	4.1 U	4.2 U	5.2 U	7 U	3.6 U	4.5 U
General Chemistry, mg/L								
Suspended Solids		NA	NA	NA	NA	NA	NA	NA
TRPH		NA	NA	NA	NA	NA	NA	NA

Appendix E
Table E-2. Summary of Groundwater Analytical Results
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Naval Training Center, Orlando
Orlando, FL

NA =	Identified parameter not analyzed.
Sample ID =	Sample Identifier
Lab ID =	Laboratory Identifier
Units:	
mg/kg	milligram per kilogram
ug/kg	microgram per kilogram
mg/L	milligram per liter
ug/L	microgram per liter
	The following standard analytical data qualifiers have the following definitions:
U	The analyte/compound was analyzed for but was not detected above the reported sample quantitation limit
	The number preceding the U qualifier is the reported sample quantitation limit.
J	The analyte/compound was positively identified and the associated numerical value is an estimated concentration of the analyte/compound in the sample.
UJ	The analyte/compound was not detected above the reported sample quantitation limit.
	The reported quantitation limit, however, is approximate and may or may not represent the actual limit of quantitation necessary to accurately measure the analyte/compound in the sample.
R	The sample results are rejected during data validation because of serious deficiencies in meeting quality control criteria.
D	Reported concentration is from a dilution or reanalysis of the sample.